FOR.A®
INNOVATIONS IN VIDEO
and AUDIO TECHNOLOGY

OPERATION MANUAL

MBP-12GUILE
MBP-12GUI

MBP-12 Series Control GUI

Version 1.5.4 - Higher

FOR-A COMPANY LIMITED

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Upon Receipt

Unpacking

The MBP-12 Series Control GUI and its accessories are fully inspected and adjusted prior to shipment. Operation can be performed immediately upon completing all required connections and operational settings.

Check your received items against the packing lists below.

ITEM	QTY	REMARKS
Installation disc (*1)	1	MBP-12 GUILE/GUI
License dongle (*1)	1	USB dongle
Operation manual	1	

*1 Not supplied with the one preinstalled on the MBP-100CK.

Check

Check to ensure no damage has occurred during shipment. If damage has occurred, or items are missing, inform your supplier immediately.

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1. Prior to Starting

1-1. About MBP-12GUILE/GUI

MBP-12GUILE/GUI is a software application for controlling the MBP-1244. MBP-12GUI can also control the MBP-100CK or MBP-12CK chromakey option. MBP-12RU Remote Control Unit for controlling the MBP-1244 is also available separately from MBP-12GUILE/GUI.

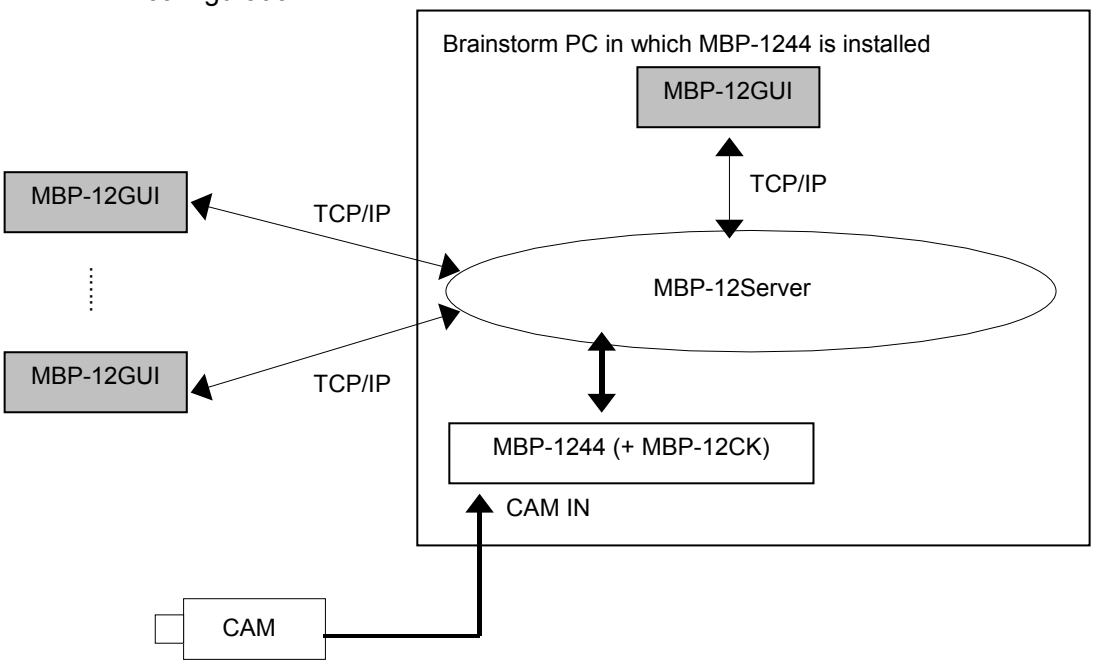
(Hereafter, MBP-12GUILE and MBP-12GUI are jointly referred to as “MBP-12GUI” in this manual. However, the descriptions related to the MBP-100CK and MBP-12CK are intended for MBP-12GUI only, since they can only be controlled with MBP-12GUI.)

NOTE
MBP-12GUILE cannot control the MBP-100CK and MBP-12CK.

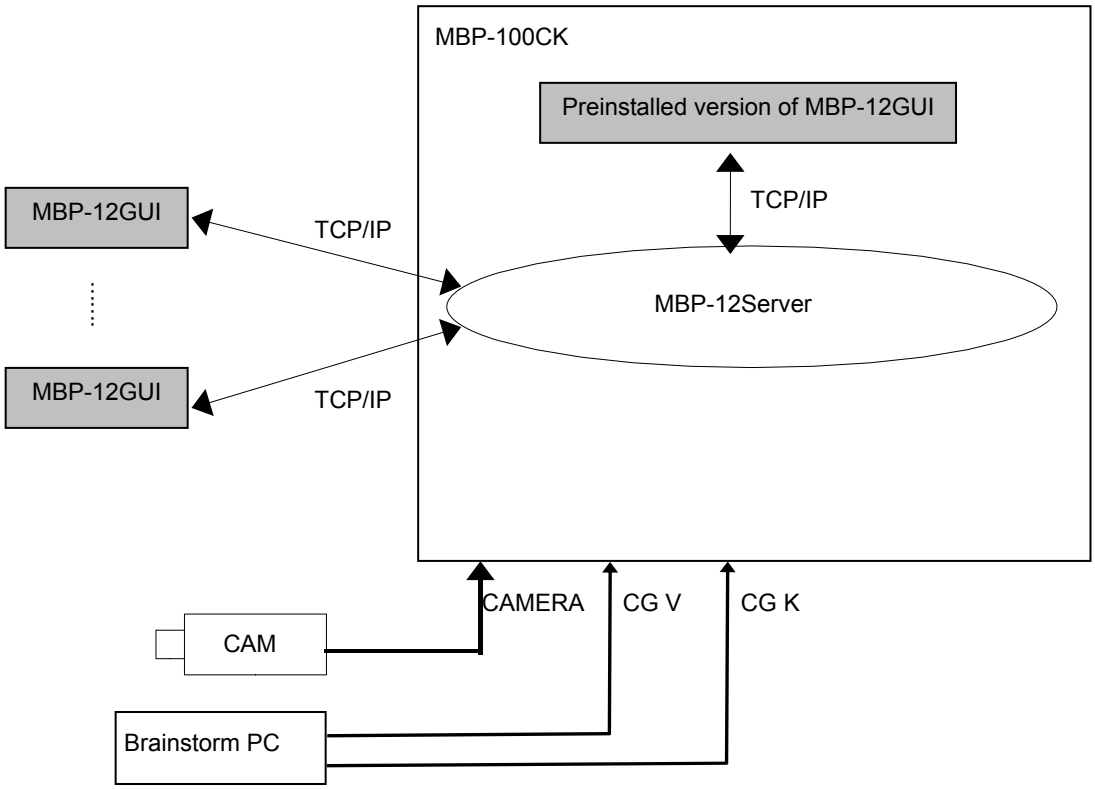
On the Brainstorm PC in which MBP-1244 is installed or on the MBP-100CK, MBP-12Server is installed. MBP-12GUI or MBP-12RU controls MBP-1244 or MBP-100CK through MBP-12Server using the TCP/IP protocol. MBP-12RU is supported for switchable controls of up to 5 MBP-1244 or MBP-100CK units. Meanwhile, multiple MBP-12RU and/or MBP-12GUI can control the same MBP-1244.

NOTE
MBP-12GUI preinstalled on the MBP-100CK can only control the MBP-100CK on which it is preinstalled. To control other MBP-1244 or MBP-100CK via the network, please purchase MBP-12GUI separately.

- MBP-1244 configuration



- MBP-100CK configuration



1-2. Features

- Supported for switchable controls of up to 5 MBP-1244 or MBP-100CK units
- The Ethernet connection (100BASE-TX/1000BASE-T) is used to connect MBP-1244 or MBP-100CK
- Multiple MBP-12RUs can control the same MBP-1244 or MBP-100CK
- User-friendly user interface
- Up to 100 events can be stored
- Settings can be copied between main units or cameras

1-3. System Requirements

Model	PC/AT
CPU	Intel Core 2 Duo 1GHz or faster (or equivalent)
Memory	1GB or more
OS	WindowsXP SP2 or later (32bit) Windows7 Professional/Ultimate (32bit/64bit)
Library	Microsoft .NET Framework 2.0 SP1 or later
Display	Resolution of 1024 x 768 pixels or better. Must be capable of full color display.
USB port	At least one USB1.1 compatible port
Network port	At least one 100BASE-TX/1000BASE-T compatible port

2. Preparation

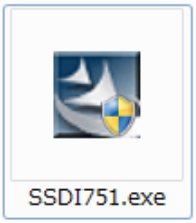
2-1. Software Installation (Not for MBP-100CK)

This section describes how to install the dongle driver, **Windows Installer 3.1**, **.NET Framework 2.0 SP1**, and **MBP-12GUI**. However, if you are using Windows7, the installation of **Windows Installer 3.1**, and **.NET Framework 2.0 SP1** are not needed.

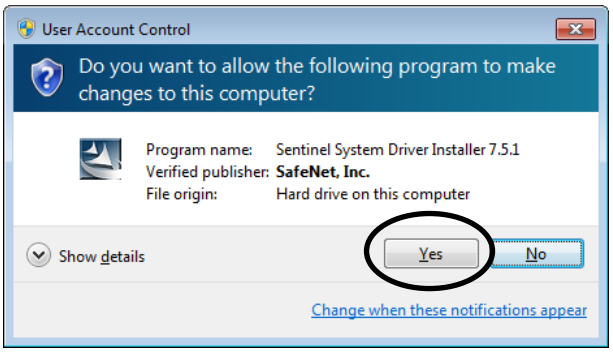
IMPORTANT
This installation must be done as a user with administrator privileges.

2-1-1. Installing Dongle Driver

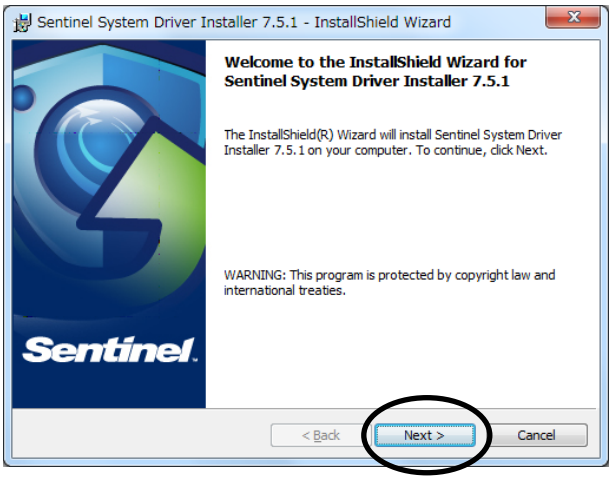
(1) Insert the supplied CD-ROM into the CD-ROM drive and double-click **\LicenseDongle\SSDI751.exe** in Windows Explorer to run the wizard.



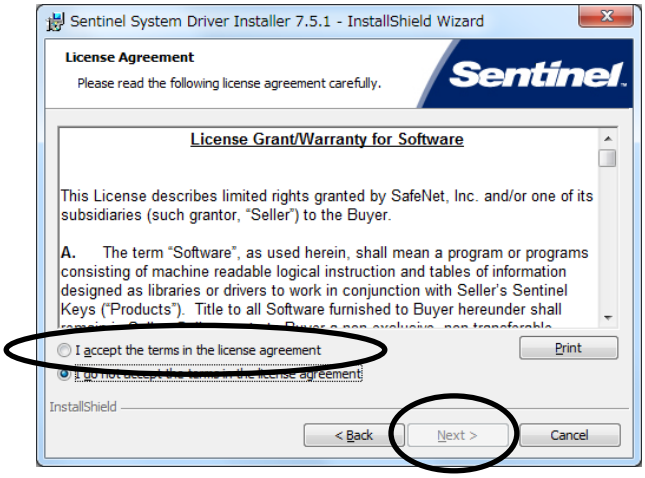
If you are using **Windows7**, a confirmation dialog for the user account control as shown below may appear. In that case, click **Yes** to continue the installation.


User Account Control
Do you want to allow the following program to make changes to this computer?
Program name: Sentinel System Driver Installer 7.5.1
Verified publisher: SafeNet, Inc.
File origin: Hard drive on this computer
Show details
Yes
No
Change when these notifications appear

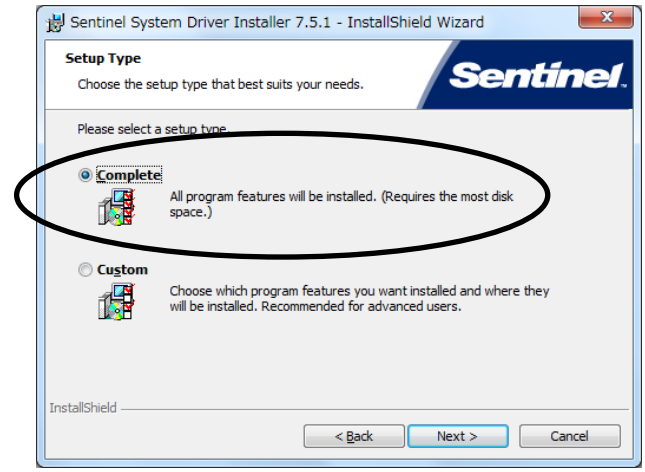
(2) Click **Next**.


Sentinel System Driver Installer 7.5.1 - InstallShield Wizard
Welcome to the InstallShield Wizard for Sentinel System Driver Installer 7.5.1
The InstallShield(R) Wizard will install Sentinel System Driver Installer 7.5.1 on your computer. To continue, click Next.
WARNING: This program is protected by copyright law and international treaties.
Sentinel
< Back
Next >
Cancel

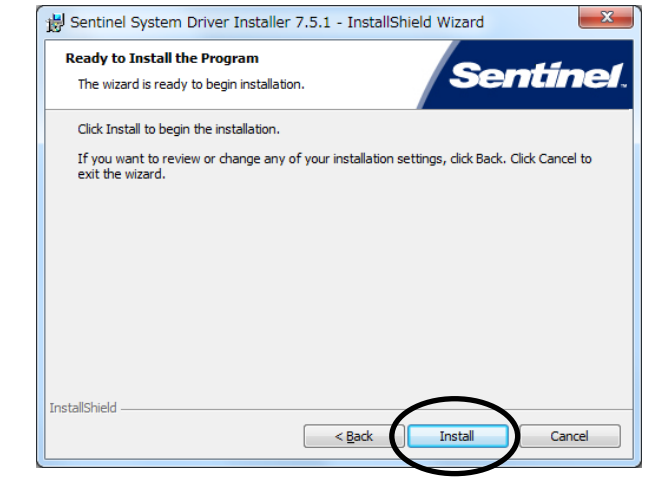
(3) Select **I accept the terms in the license agreement** and click **Next**.


Sentinel System Driver Installer 7.5.1 - InstallShield Wizard
License Agreement
Please read the following license agreement carefully.
Sentinel
License Grant/Warranty for Software
This License describes limited rights granted by SafeNet, Inc. and/or one of its subsidiaries (such grantor, "Seller") to the Buyer.
A. The term "Software", as used herein, shall mean a program or programs consisting of machine readable logical instruction and tables of information designed as libraries or drivers to work in conjunction with Seller's Sentinel Keys ("Products"). Title to all Software furnished to Buyer hereunder shall
I accept the terms in the license agreement
Print
InstallShield
< Back
Next >
Cancel

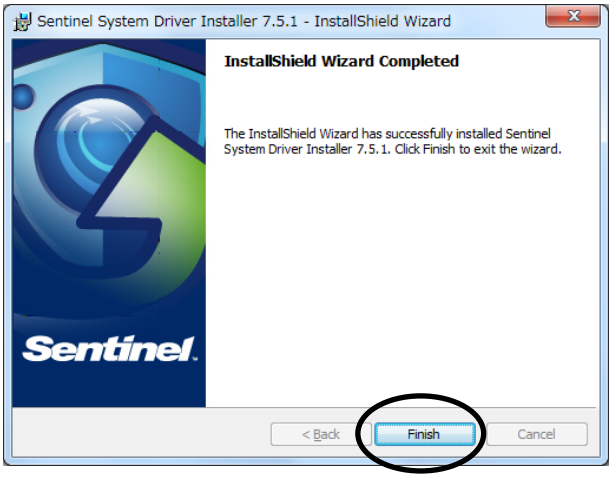
(4) Select **Complete** and click **Next**.


Sentinel System Driver Installer 7.5.1 - InstallShield Wizard
Setup Type
Choose the setup type that best suits your needs.
Sentinel
Please select a setup type.
Complete
All program features will be installed. (Requires the most disk space.)
Custom
Choose which program features you want installed and where they will be installed. Recommended for advanced users.
InstallShield
< Back
Next >
Cancel

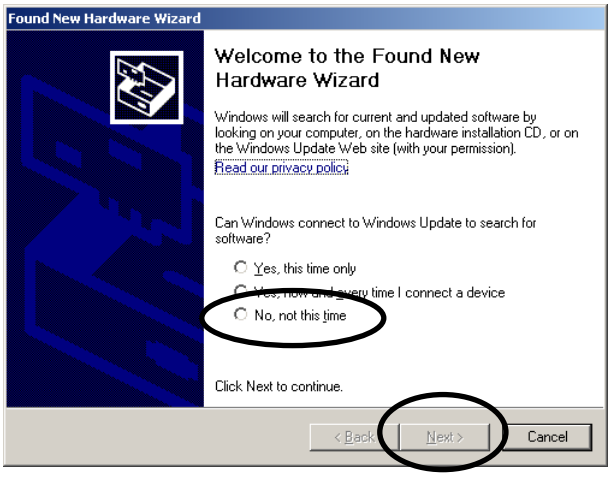
(5) Click **Install** to start the installation.


Sentinel System Driver Installer 7.5.1 - InstallShield Wizard
Ready to Install the Program
The wizard is ready to begin installation.
Sentinel
Click Install to begin the installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
InstallShield
< Back
Install
Cancel

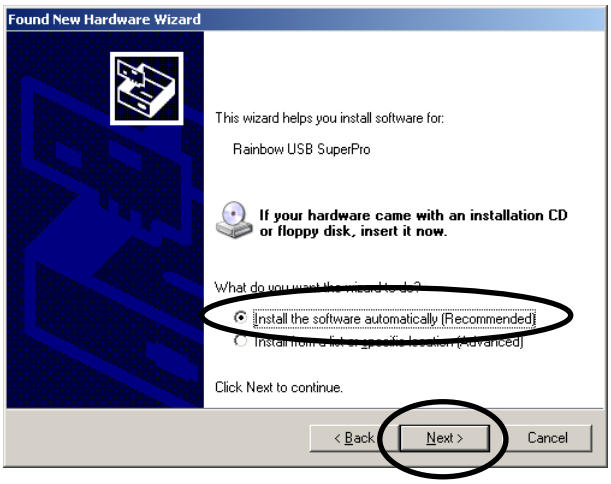
(6) After the installation is complete, click **Finish**.


Sentinel System Driver Installer 7.5.1 - InstallShield Wizard
InstallShield Wizard Completed
The InstallShield Wizard has successfully installed Sentinel System Driver Installer 7.5.1. Click Finish to exit the wizard.
Sentinel
< Back
Finish
Cancel

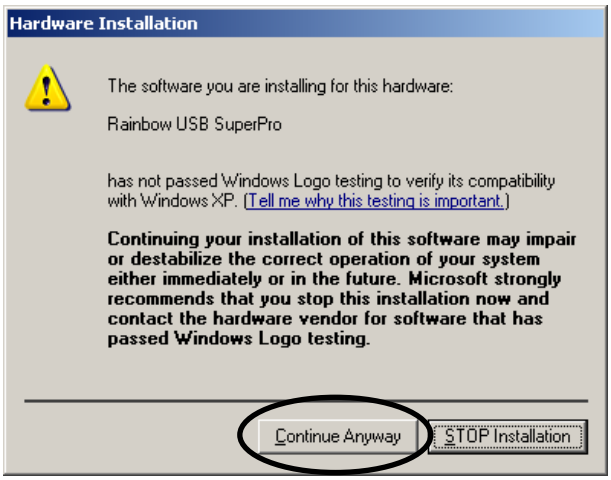
(7) Plug the license dongle into the USB port. If you are using WindowsXP, the screen as shown below is displayed, when you first plug the dongle. Select **No, not this time** and click **Next**.


Found New Hardware Wizard
Welcome to the Found New Hardware Wizard
Windows will search for current and updated software by looking on your computer, on the hardware installation CD, or on the Windows Update Web site (with your permission).
Read our privacy policy
Can Windows connect to Windows Update to search for software?
Yes, this time only
No, not this time
Click Next to continue.
< Back
Next >
Cancel

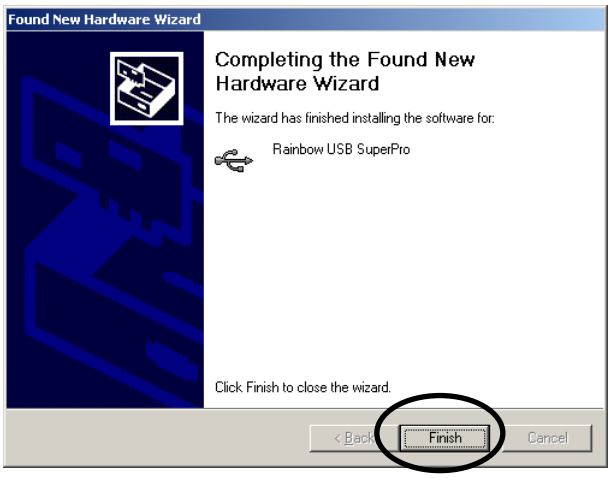
(8) Select **Install the software automatically (Recommended)** and click **Next**.


Found New Hardware Wizard
This wizard helps you install software for:
Rainbow USB SuperPro
If your hardware came with an installation CD or floppy disk, insert it now.
Install the software automatically (Recommended)
Click Next to continue.
< Back
Next >
Cancel

(9) The screen as shown below is displayed. Click **Continue Anyway**.


Hardware Installation
The software you are installing for this hardware:
Rainbow USB SuperPro
has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)
Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
Continue Anyway
STOP Installation

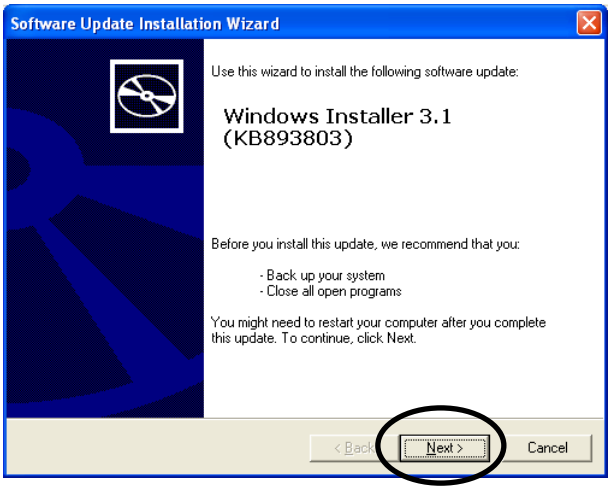
(10) Click **Finish**. The dongle driver installation is now complete.



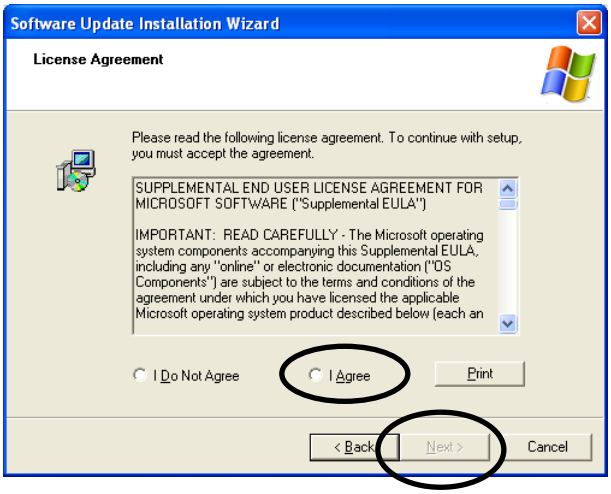
2-1-2. Installing Windows Installer 3.1

(1) If **Windows Installer 3.1 (v2)** is not installed on you computer, double-click **\Microsoft\WindowsInstaller-KB893803-v2-x86.exe** on the CD-ROM to run the wizard. However, if you are using Windows7, this installation is not needed.

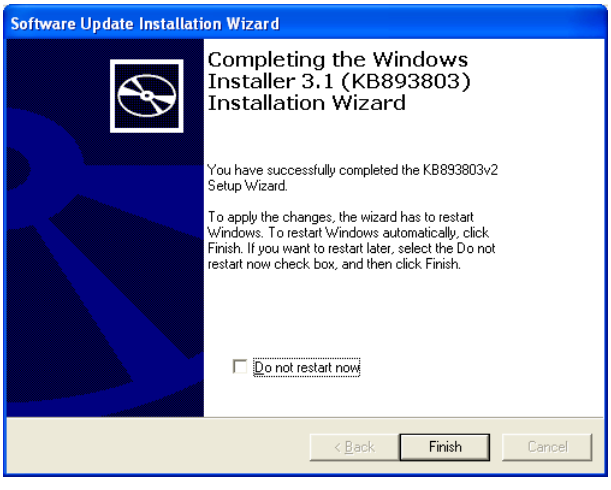
(2) Click **Next**.


Software Update Installation Wizard
Use this wizard to install the following software update:
Windows Installer 3.1 (KB893803)
Before you install this update, we recommend that you:
- Back up your system
- Close all open programs
You might need to restart your computer after you complete this update. To continue, click Next.
< Back
Next >
Cancel

(3) Select **I agree** and click **Next**.


Software Update Installation Wizard
License Agreement
Please read the following license agreement. To continue with setup, you must accept the agreement.
SUPPLEMENTAL END USER LICENSE AGREEMENT FOR MICROSOFT SOFTWARE ("Supplemental EULA")
IMPORTANT: READ CAREFULLY - The Microsoft operating system components accompanying this Supplemental EULA, including any "online" or electronic documentation ("OS Components") are subject to the terms and conditions of the agreement under which you have licensed the applicable Microsoft operating system product described below (each an
I Do Not Agree
I Agree
Print
< Back
Next >
Cancel

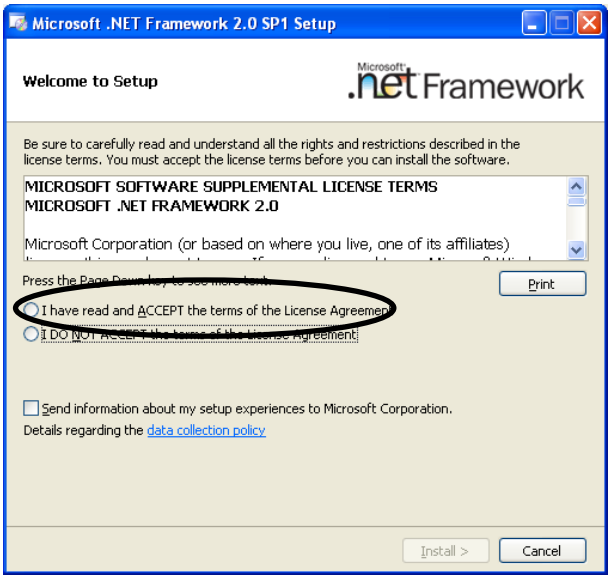
(4) After the installation is complete, you will be asked to restart your computer. Click **Finish** to restart your computer.


Software Update Installation Wizard
Completing the Windows Installer 3.1 (KB893803) Installation Wizard
You have successfully completed the KB893803v2 Setup Wizard.
To apply the changes, the wizard has to restart Windows. To restart Windows automatically, click Finish. If you want to restart later, select the Do not restart now check box, and then click Finish.
Do not restart now
< Back
Finish
Cancel

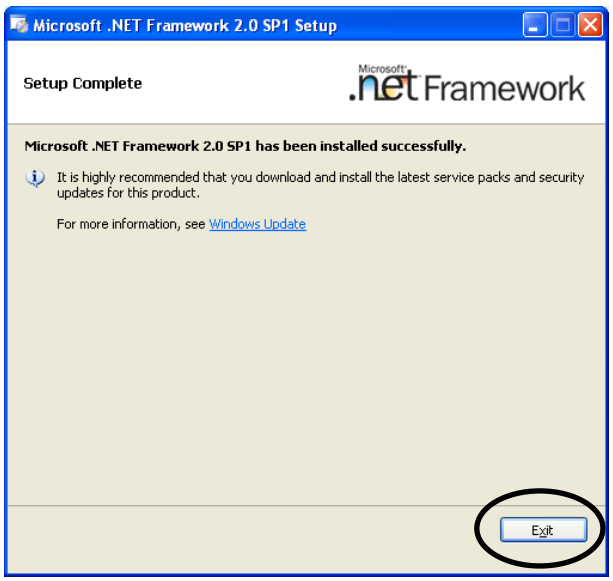
2-1-3. Installing .NET Framework 2.0 SP1

(1) If **.NET Framework 2.0 SP1** is not installed on your computer, double-click **\Microsoft\NetFx20SP1_x86.exe** on the CD-ROM to run the setup wizard. However, if you are using Windows7, this installation is not needed.

(2) Select **I have read and ACCEPT the terms of the License Agreement** and click **Install** to start the installation.


Microsoft .NET Framework 2.0 SP1 Setup
Welcome to Setup
Microsoft .net Framework
Be sure to carefully read and understand all the rights and restrictions described in the license terms. You must accept the license terms before you can install the software.
MICROSOFT SOFTWARE SUPPLEMENTAL LICENSE TERMS
MICROSOFT .NET FRAMEWORK 2.0
Microsoft Corporation (or based on where you live, one of its affiliates)
Print
I have read and ACCEPT the terms of the License Agreement
Send information about my setup experiences to Microsoft Corporation.
Details regarding the data collection policy
Install >
Cancel

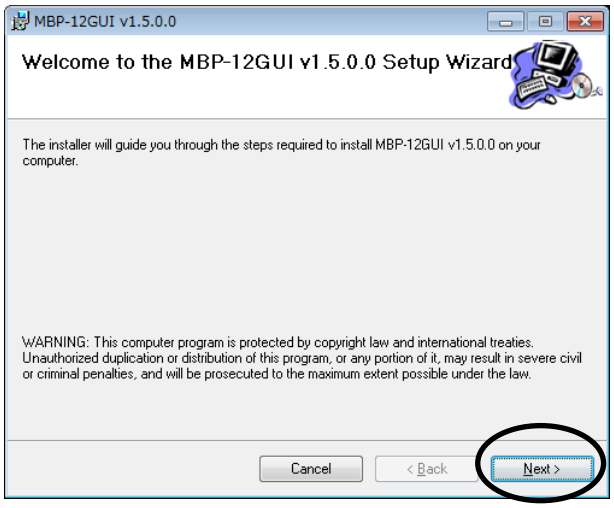
(3) After the installation is complete, click **Exit**.


Microsoft .NET Framework 2.0 SP1 Setup
Setup Complete
Microsoft .net Framework
Microsoft .NET Framework 2.0 SP1 has been installed successfully.
It is highly recommended that you download and install the latest service packs and security updates for this product.
For more information, see Windows Update
Exit

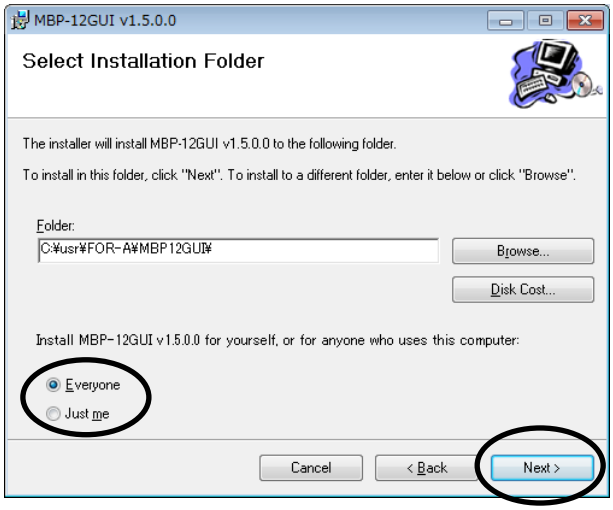
2-1-4. Installing MBP-12GUI

(1) Double-click **SetupMbp12Gui.msi** on the CD-ROM to run the setup wizard.

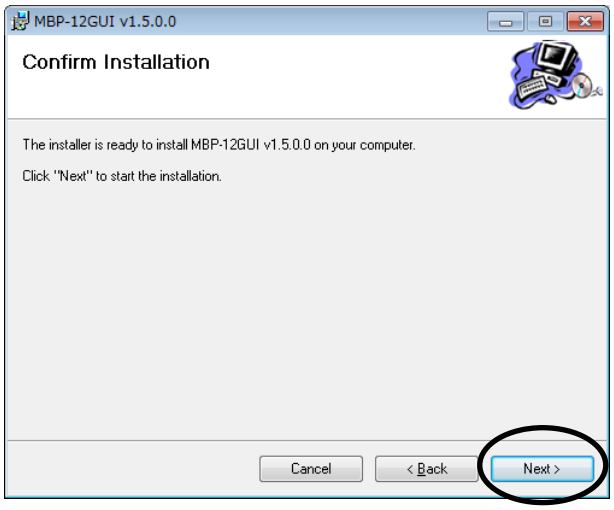
(2) Click **Next**.


MBP-12GUI v1.5.0.0
Welcome to the MBP-12GUI v1.5.0.0 Setup Wizard
The installer will guide you through the steps required to install MBP-12GUI v1.5.0.0 on your computer.
WARNING: This computer program is protected by copyright law and international treaties. Unauthorized duplication or distribution of this program, or any portion of it, may result in severe civil or criminal penalties, and will be prosecuted to the maximum extent possible under the law.
Cancel
< Back
Next >

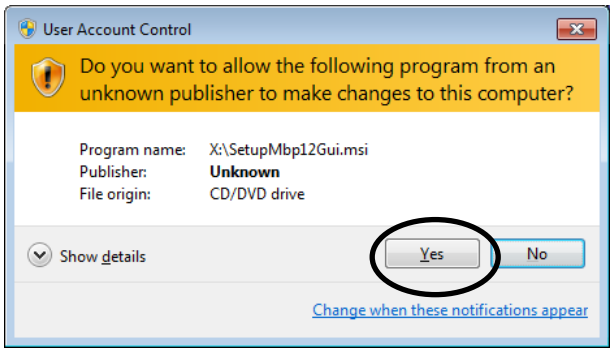
(3) Select whether to install the application for all users or yourself, and click **Next**. The default setting is **Everyone**.


MBP-12GUI v1.5.0.0
Select Installation Folder
The installer will install MBP-12GUI v1.5.0.0 to the following folder.
To install in this folder, click "Next". To install to a different folder, enter it below or click "Browse".
Folder:
C:¥usr¥FOR-A¥MBP12GUI¥
Browse...
Disk Cost...
Install MBP-12GUI v1.5.0.0 for yourself, or for anyone who uses this computer:
Everyone
Just me
Cancel
< Back
Next >

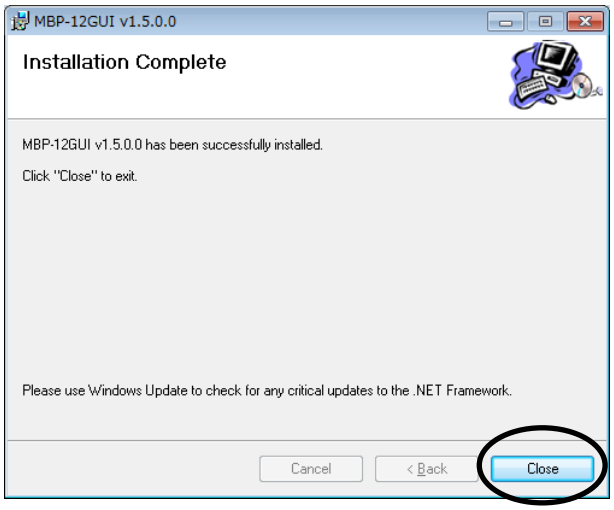
(4) Click **Next** to start the installation.


MBP-12GUI v1.5.0.0
Confirm Installation
The installer is ready to install MBP-12GUI v1.5.0.0 on your computer.
Click "Next" to start the installation.
Cancel
< Back
Next >

If you are using **Windows7**, a confirmation dialog for the user account control as shown below may appear. In that case, click **Yes** to continue the installation.

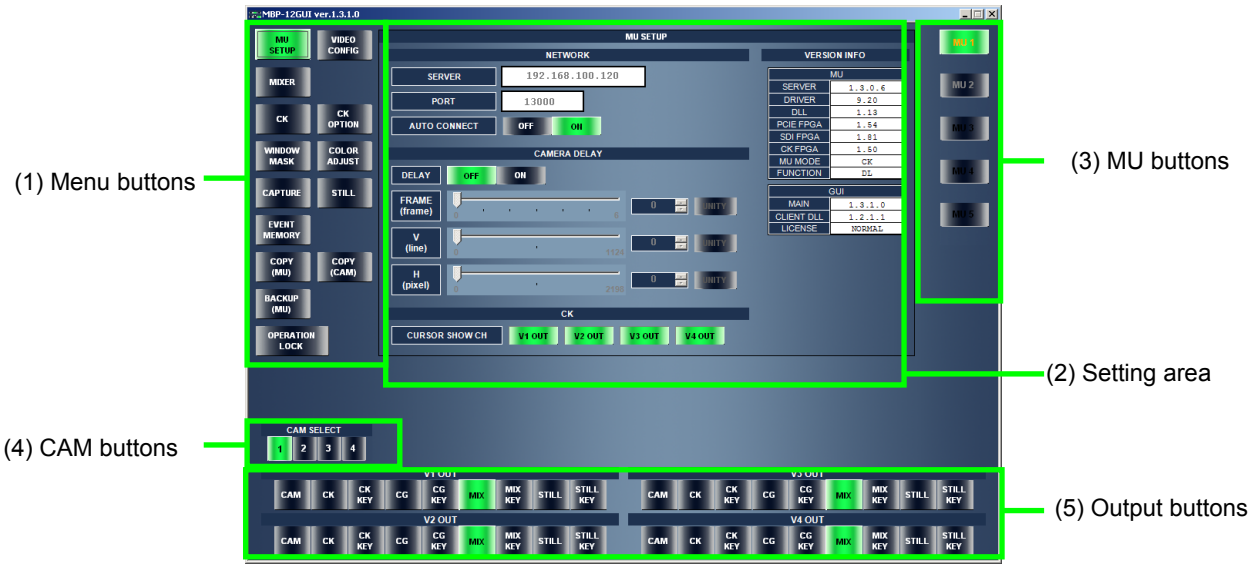

User Account Control
Do you want to allow the following program from an unknown publisher to make changes to this computer?
Program name: X:\SetupMbp12Gui.msi
Publisher: Unknown
File origin: CD/DVD drive
Show details
Yes
No
Change when these notifications appear

(5) After the installation is complete, click **Close**.


MBP-12GUI v1.5.0.0
Installation Complete
MBP-12GUI v1.5.0.0 has been successfully installed.
Click "Close" to exit.
Please use Windows Update to check for any critical updates to the .NET Framework.
Cancel
< Back
Close

2-2. Starting MBP-12GUI

Choose **Start > All Programs > FOR-A > MBP-12 > MBP-12GUI** to start the application. On the MBP-100CK, the application is automatically started after boot-up. After MBP-12GUI is started, the screen as shown below, consisting of 5 panes, is displayed.



(1) Menu buttons
Allow you to switch between menus. The CAPTURE button and the STILL button are active only for MBP-100CK.

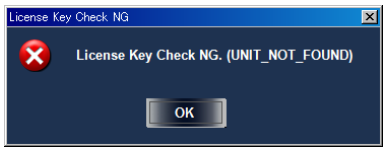
(2) Setting area
The screen of the currently selected menu, selected with a menu button (1), is displayed.

(3) MU buttons
Allow you to switch between main units (MU). Up to 5 main units can be controlled. The text color on the button appears different depending on the connection status.
Orange: **AUTO CONNECT** (see 3-1. (1) (c)) is **ON** and the connection is established.
Black: **AUTO CONNECT** is set to **OFF**.
Gray: **AUTO CONNECT** is **ON** but the connection is not established.

(4) CAM buttons
Allow you to switch between **CAM1-CAM4** chromakey parameters. These buttons are disabled if **MBP-12CK** (optional) is not installed in the main unit.

(5) Output buttons
Allow you to select a signal to output to each output channel (**V1 OUT - V4 OUT**). As the factory default, **CAM, CK, CK KEY, CG, CG KEY, MIX, MIX KEY, STILL**, and **STILL KEY** are assigned to the buttons in the row from left to right. To change the assignments, see section 3-3-5 “Output Button Assignments”.
The **CK** and **CK KEY** buttons are disabled if **MBP-12CK** (optional) is not installed in the main unit. The buttons **CG2, V1 IN, V1 IN KEY,** and **V2 IN** are disabled if you are using the main unit that does not support **CG2, V1 IN, V2 IN** or **MBP-100CK**. **STILL** and **STILL KEY** are available on the MBP-100CK only. See section 3-3-1 “LAYER SOURCE ASSIGN Signals” for details on signals.

If the license dongle is not connected or recognized, an error message as shown below is displayed and **MBP-12GUI** will not run. The license dongle needs to be connected while running the application. The license dongle is not required for the MBP-12GUI preinstalled on the MBP-100CK.



NOTE
The dongle may not be recognized after being recovered from Windows Stand By mode or Hibernate mode. In that case, restart Windows.

2-3. Registering a Main Unit (Not for MBP-100CK)

In order to control a main unit, first it needs to be registered in **MBP-12GUI**. Follow the steps below to register a main unit.

(1)Select an MU button (**MU1**-**MU5**) of the main unit you wish to register.
(2) Select the **MU SETUP** menu button.
(3) In **NETWORK**, set **AUTO CONNECT** to **OFF**.
(4) In **SERVER**, enter the hostname or IP address of the main unit you wish to register.

Repeat the above steps for all main units.
In MBP-12GUI preinstalled on the MBP-100CK, the hostname in **SERVER** is fixed to **localhost**.

2-4. Menu Structure

The MBP-12GUI menu structure is as follows.

MU 1 - MU 5
V1 OUT - V4 OUT (CAM, CK, CK KEY, CG, CG KEY, MIX, MIX KEY, STILL, STILL KEY, CG2, CG2 KEY, V1 IN, V1 IN KEY, V2 IN; STILL and STILL KEY are available on the MBP-100CK only)
CAM SELECT 1-4
MU SETUP

- NETWORK (SERVER, PORT, AUTO CONNECT ON/OFF)
- CAMERA DELAY (FRAME, V, H)
- CK (CURSOR SHOW CH)
- VERSION INFO

VIDEO CONFIG

- TV STANDARD
- GENLOCK FORMAT
- GENLOCK PHASE（V, H）
- GENLOCK STATUS

MIXER

- LAYER SOURCE ASSIGN (VIRTUAL / RCG / USER1 / USER2 / USER3)
- SOURCE ON/OFF
- MIX MODE (NORMAL, ADD)
- KEY CLIP
- KEY GAIN

CK (Not available in MBP-12GUILE)

- CURSOR CONTROL (X, Y, ON/OFF, SET)
- BG CONDITION (STANDARD, BLUE BACK UNIFORM/UNEVEN, GREEN BACK UNIFORM/UNEVEN)
- BACK COLOR (HUE, SATURATION, LUMINANCE)
- TUNING (COLOR SUPPRESION, MATTE DENSITY)
- FINE TUNING (COLOR SUPPRESSION, MATTE DENSITY) WHITE, BLACK, RED, GREEN, BLUE, SOLIDNESS
- PARAMETERS ALL RESET

CK OPTION (Not available in MBP-12GUILE)

WINDOW MASK (Not available in MBP-12GUILE)

- WINDOW MASK (ON / OFF)
- INVERT (ON / OFF)
- KEY GAIN
- EDGE SOFTNESS
- REGION (TOP, BOTTOM, LEFT, RIGHT)

COLOR ADJUST (Not available in MBP-12GUILE)

- Y, Pb, Pr (OFFSET, GAIN)

CAPTURE (MBP-100CK only)
- CAM INPUT CAPTURE
- CK SOURCE (EXTERNAL, INTERNAL)
- FILE (IMPORT, EXPORT)
- PANE MODE (CAPTURE, FILER)
- COPY, MOVE, RENAME, DELETE, MKDIR, RMDIR
- MULTISEL

STILL (MBP-100CK only)
- FILE (IMPORT, EXPORT)
- COPY, MOVE, RENAME, DELETE, MKDIR, RMDIR
- MULTISEL

EVENT MEMORY
- LOAD
- SAVE
- DELETE
- RENAME
- IMPORT
- EXPORT

COPY (MU)
COPY (CAM)
BACKUP (MU)
OPERATION LOCK

3. Menu Description

3-1. MU SETUP

MU SETUP allows you to set the MU settings. The following items are available in **MU SETUP**.

(1) NETWORK
- (a) SERVER
  Allows you to set the hostname or IP address of the main unit. It can be up to 256 characters in length. In MBP-12GUI preinstalled on the MBP-100CK, the hostname in **SERVER** is fixed to **localhost**.
- (b) PORT
  Allows you to set the port number of the main unit in the range from **1** to **65534**. Usually, it does not need to be changed from the default of **13000**.
- (c) AUTO CONNECT ON/OFF buttons
  Allow you to connect to or disconnect from the main unit.
  Setting to **ON** establishes the connection to the main unit. If the connection is terminated for some reason, it will be automatically reestablished. Setting to **OFF** terminates the current connection from the main unit and the connection will not be reestablished.

(2) CAMERA DELAY
- (a) DELAY ON/OFF
  Allows you to turn on or off the camera delay settings. Setting to **ON** enables the settings described in (b)-(d) below.
- (b) FRAME (frame)
  Allows you to set the amount of the frame delay of the camera delay. Enter the value directly into the box or use the slider to set the value. The setting range is 0 to 6 frames regardless of the TV standard.
- (c) V (line)
  Allows you to set the amount of the vertical line delay of the camera delay. Enter the value directly into the box or use the slider to adjust the value. The setting range changes depending on the TV standard.
- (d) H (pixel)
  Allows you to set the amount of the horizontal pixel delay of the camera delay by 2 pixels. Enter the value directly into the box or use the slider to adjust the value. The setting range changes depending on the TV standard.

(3) CK

This item is disabled if **MBP-12CK** (optional) is not installed in the main unit.

(a) CURSOR SHOW CH (V1 OUT - V4 OUT)

Allows you to set whether to show or hide the chromakey cursor on each output channel when the cursor is turned on.

(4) VERSION INFO

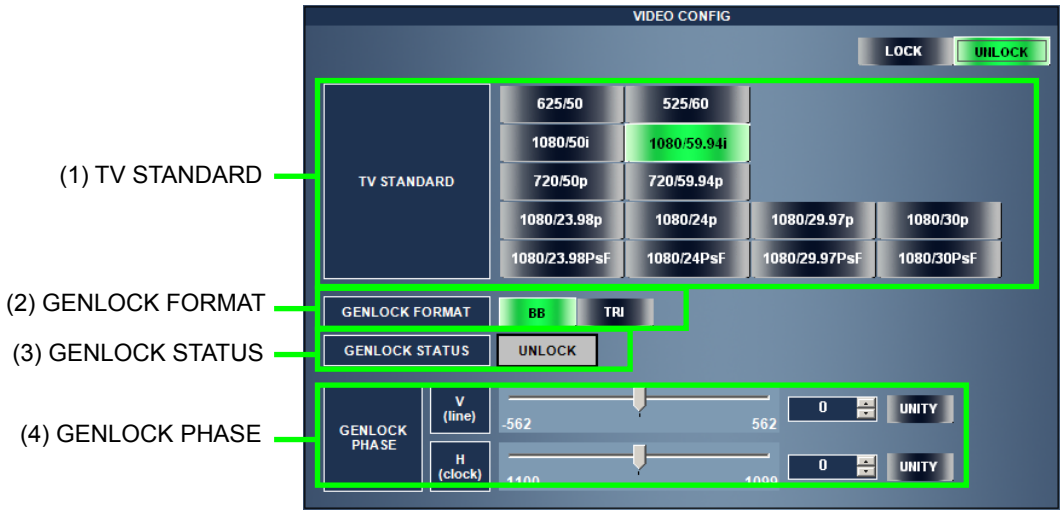
Displays the version information of the main unit and MBP-12GUI.

The version information of the main unit is displayed only when it is connected.

MU/GUI	Item	Description
MU	SERVER	Version of MBP-12Server to which MBP-12GUI is connected
	DRIVER	Version of device driver for MBP-1244
	DLL	Version of API DLL for MBP-1244
	PCIE FPGA	Version of FPGA for MBP-1244 PCI Express
	SDI FPGA	Version of FPGA for MBP-1244 SDI
	CK FPGA	Version of FPGA for MBP-12CK
	MU MODE	Operation mode of the main unit NORMAL: MBP-1244 (normal) mode CK : MBP-100CK mode
	FUNCTION	MBP-1244 function DL: Delay line (camera delay)
GUI	MAIN	MBP-12GUI main program version
	CLIENT DLL	Version of the client DLL for communicating with MBP-12GUI
	LICENSE	License mode NORMAL: Normal mode WITHOUT CK: No CK option and MBP-12GUILE mode LOCAL ONLY: The application preinstalled on the MBP-100CK

3-2. VIDEO CONFIG

VIDEO CONFIG allows you to set the video related settings. After you select the **VIDEO CONFIG** menu, the **LOCK** button in the upper right is turned on for avoiding unnecessary changes, and therefore you will not be able to change the settings. To change the settings, click the **UNLOCK** button. After changing the settings, clicking the **LOCK** button or moving to another menu disables the settings again. The following items are available in the **VIDEO CONFIG** menu.



(1) TV STANDARD

Allows you to set the TV standard. The buttons for the TV formats that are not available are disabled.

(2) GENLOCK FORMAT

Allows you to set the genlock signal format to input to the MBP-1244 GENLOCK connector. The available formats are **BB** (black burst) and **TRI** (tri-level sync). For some TV standards, either **BB** or **TRI** only is available.

(3) GENLOCK STATUS

Displays the genlock status. If the signal is locked, **LOCK** is displayed. If it is not locked, **UNLOCK** is displayed.

(4) GENLOCK PHASE

Allows you to adjust the genlock phase of the SDI output signal.

(a) V (line)

Enter the value directly into the box or use the slider to adjust the vertical phase by one line. The setting range changes depending on the TV standard. Click the **UNITY** button to reset the value to **0**.

(b) H (clock)

Enter the value directly into the box or use the slider to adjust the horizontal phase by one clock. The setting range changes depending on the TV standard. Click the **UNITY** button to reset the value to **0**.

3-3. MIXER

MIXER allows you to set the mixer settings. MBP-1244 has 4 inputs, 4 outputs, and 2 mixers (4 layers available for each mixer) called **MIXER 1** and **MIXER 2**. **V1 OUT** and **V2 OUT** of 4 outputs belong to **MIXER 1**, and **V3 OUT** and **V4 OUT** belong to **MIXER 2**.

3-3-1. LAYER SOURCE ASSIGN Signals

The following eight signals are available for assigning to each layer.

Signal Name	Description	
NO ASSIGN	No signal is assigned.	
CAM (INT / EXT)	A camera signal is assigned.	
	MBP-1244	A signal (EXT) input to the CAM connector.
	MBP-100CK	A signal (EXT) input to the CAM connector or an internally generated still image (INT), depending on the **CK SOURCE** setting described in section 3-8-1. "Capturing a Still Image from an External Camera (Basics)."
CK (INT / EXT)	A chromakey signal is assigned.	
	MBP-1244	A signal (EXT) input to the CAM connector.
	MBP-100CK	A signal (EXT) input to the CAMERA INPUT connector or an internally generated signal (INT), depending on the **CK SOURCE** setting described in section 3-8-1. "Capturing a Still Image from an External Camera (Basics)."
	This signal is available only when the MBP-12CK chromakey option is installed. If the MBP-12CK is not installed, it is automatically disabled (same as NO ASSIGN).	
CG (INT / EXT)	A graphic signal is assigned.	
	MBP-1244	A graphic signal (INT) internally generated in Brainstorm.
	MBP-100CK	A signal (EXT) input to the CG (V/K) connector.
CG2	The secondary graphic signal is assigned.	
	MBP-1244	A graphic signal (INT) internally generated in Brainstorm.
	MBP-100CK	Disabled
STILL	An internally generated still image signal is assigned. Available on the MBP-100CK only.	
V1 IN	The video input 1 is assigned	
	MBP-1244	An input video in V1 IN(V) or V2 IN(K) connector.
	MBP-100CK	Disabled
V2 IN	The video input 2 is assigned	
	MBP-1244	An input video in AUX2(V) connector. No key signal.
	MBP-100CK	Disabled

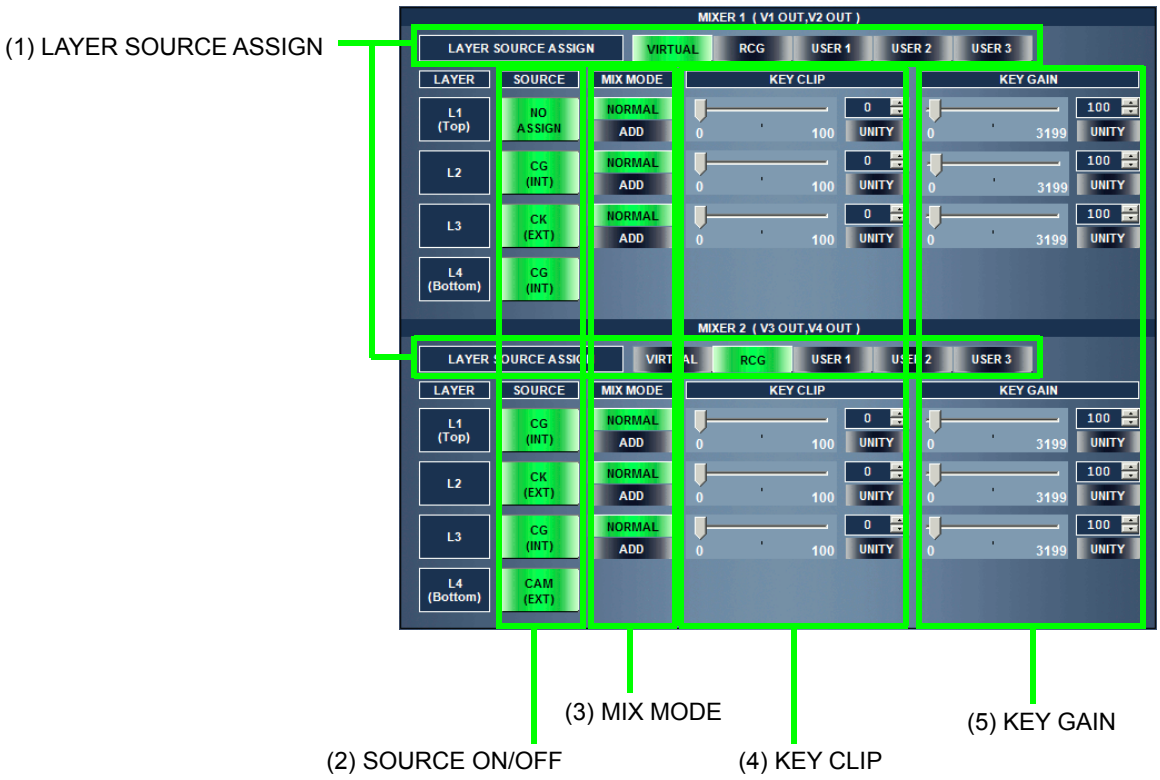
3-3-2. LAYER SOURCE ASSIGN Settings

A total of five layer assignment settings are available: two preset settings, **VIRTUAL** and **RCG**, and three user settings. The settings are as shown below.

Layer	VIRTUAL	RCG	USER1	USER2	USER3
1（Top）	NO ASSIGN	CG	Freely assignable (The default setting is **NO ASSIGN**.)		
2	CG	CK			
3	CK	CG			
4（Bottom）	CG	CAM			

3-3-3. MIXER Items

The following items are available in **MIXER**. In the example below, **LAYER SOURCE ASSIGN** for **MIXER1** is set to **VIRTUAL**, and **MIXER2** is set to **RCG**.



(1) LAYER SOURCE ASSIGN (MIXER1, MIXER2)

Allows you to select the **LAYER SOURCE ASSIGN** setting for **MIXER1** (V1 OUT, V2 OUT) and **MIXER2** (V3 OUT, V4 OUT). The available settings are **VIRTUAL**, **RCG**, **USER1**, **USER2**, and **USER3**.

(2) SOURCE ON/OFF

Allows you to set whether or not to output each layer of each mixer. Each button is toggled on and off every time it is clicked. The layers which **CK** is assigned are forced to be turned off if the **MBP-12CK** (optional) is not installed in the main unit. The layers which **STILL** is assigned are forced to be turned off except on the MBP-100CK.

(3) MIX MODE

Allows you to set the mix mode for each layer (except for the bottom later) of each mixer to **Normal** or **Add**.

(4) KEY CLIP

Allows you to adjust the key clip in the range of **0%** to **100%**. Enter the value directly into the box or use the slider to adjust the value. Click the **UNITY** button to reset the value to **0**.

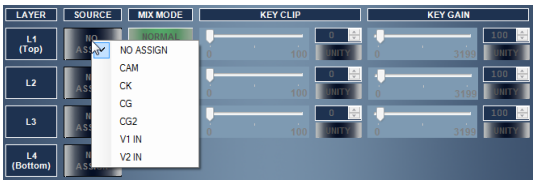
(5) KEY GAIN

Allows you to adjust the key gain in the range of **0%** to **3199%**. Enter the value directly into the box or use the slider to adjust the value. Click the **UNITY** button to reset the value to **100**.

3-3-4. LAYER SOURCE ASSIGN User Settings

Follow the steps below for setting the user settings for **LAYER SOURCE ASSIGN**.

(1) Select **USER1**, **USER2**, or **USER3** in **LAYER SOURCE ASSIGN**. Note that the assignments for **VIRTUAL** and **RCG** cannot be changed.
(2) Right-click on a **SOURCE** button of the layer that you wish to change the assignments. A right-click menu is displayed. Choose a signal to assign.
(3) The user settings can be saved in **EVENT MEMORY**, described in section 3-10. “EVENT MEMORY.”



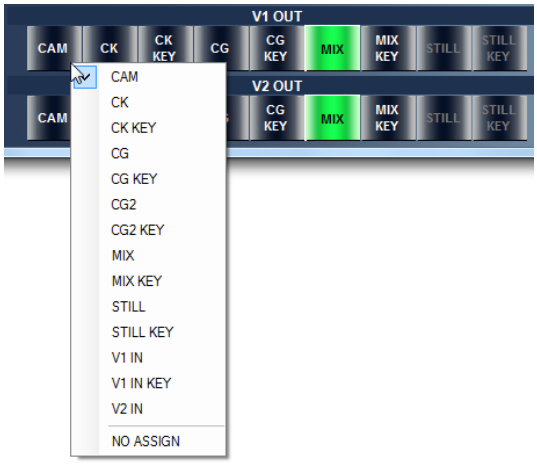
NOTE
The outputs of layers which **NO ASSIGN** is set are automatically turned off.

3-3-5. Output Button Assignments

IMPORTANT
The output button assignments can be changed on MBP-12GUI even it is not connected to the main unit or the on air lock or exclusive lock described in the section 3-14 “OPERATION LOCK” is enabled.

To change the signal assignment of the output buttons, follow the procedure below.
In this section, let us call the nine output buttons from left to right as button 1 through button 9.

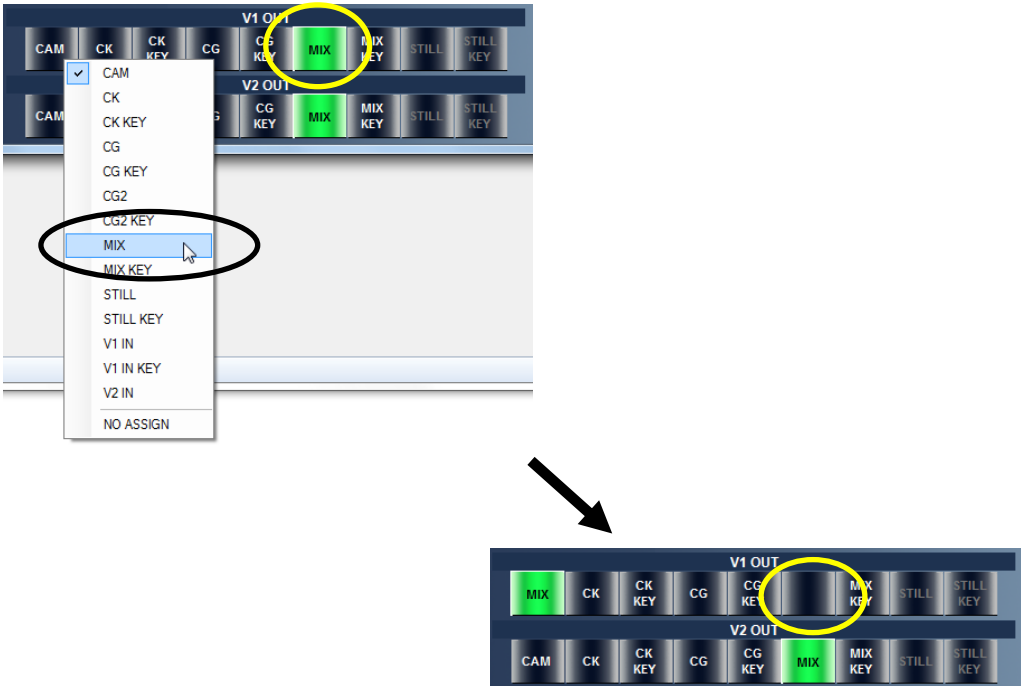
1) Right-click on the output button you want to change the assignment of. The pop-up menu appears. The currently assigned signal is indicated with a check mark.



(2) Click the signal to assign to the button. The same signal cannot be assigned to more than one button. If the selected signal is already assigned to another button, the existing assignment is replaced with the new assignment. The status of the button with the canceled assignment will become NO ASSIGN. The changes made on the assignments are automatically saved and will be retained when the application is closed, and will be recalled at the next reboot.

IMPORTANT
The layer source assignments described in the section 3-3-4 “LAYER SOURCE ASSIGN User Settings” are saved on the main unit. However, This output button assignments are saved within the MBP-12GUI. Therefore they cannot be saved as described in the sections 3-10 “EVENT MEMORY” and 3-13 “BACKUP (MU)”.

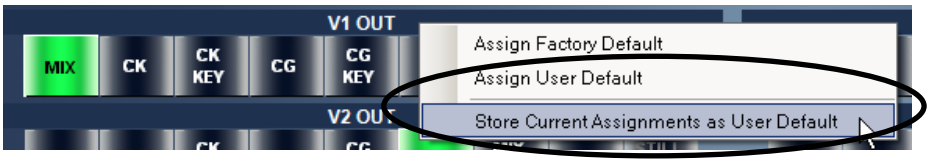
In the example below, the assignment to MIX of the button 6 of V1 OUT will be cancelled when MIX is assigned to the button 1.



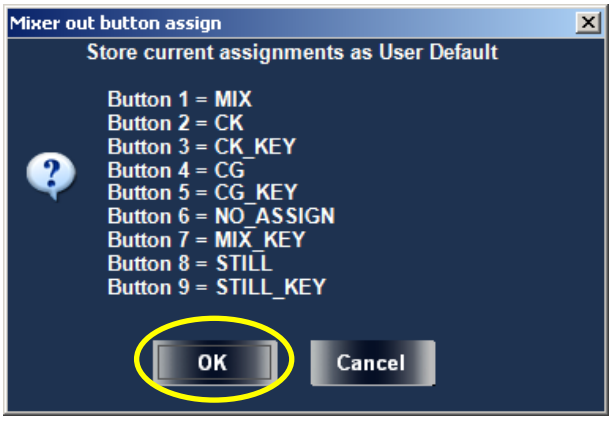
3-3-6. Output Button Assignment: User Default

The signal assignments of output buttons of a channel or channels can be set the same as the output buttons of an output channel as a set by using the user default assigning function.

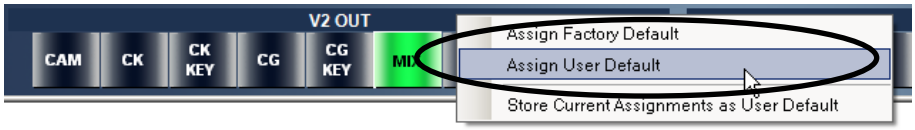
(1) Right-click on the channel label (V1 OUT, V2 OUT, V3 OUT, or V4 OUT) you are going to use as a user default assignment. The pop-up menu as shown below appears. Click **Store Current Assignments as User Default**. In this example, the assignment of V1 OUT is set to user default.



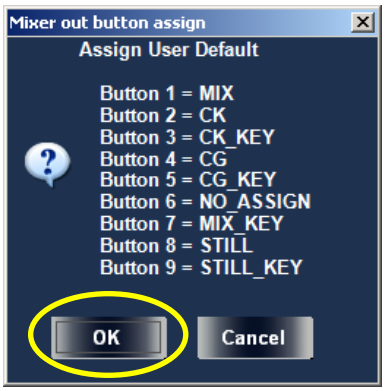
(2) A confirmation dialog appears. Click **OK**. The assignments of the selected channel is set to user default. This user default will be retained when the application is closed.



(3) Right-click on the channel label you want to set the same as the user default. Select **Assign User Default** on the pop-up menu. In this example, V2 OUT is set the same as the user default.



(4) A confirmation dialog appears. Click **OK** to assign.



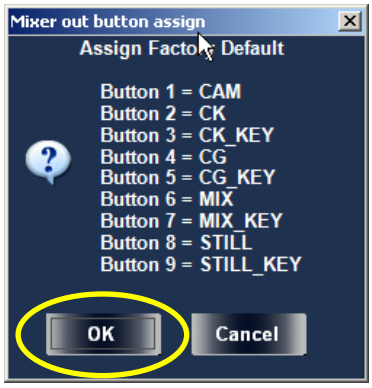
(5) The assignments of the user default are applied to the selected channel. In this example, the assignments made for V1 OUT are saved as user default, and the user default is employed to V2 OUT. As a result, the button assignments of V1 OUT and V2 OUT become the same.

3-3-7. Output Button Assignment: Factory Default

To reset the signal assignments of the output buttons, use the factory default function as follows.

(1) Right-click on the channel label you want to reset to factory default. Click **Assign Factory Default** on the pop-up menu.

(2) A confirmation dialog appears. Click **OK** to reset to the factory default.

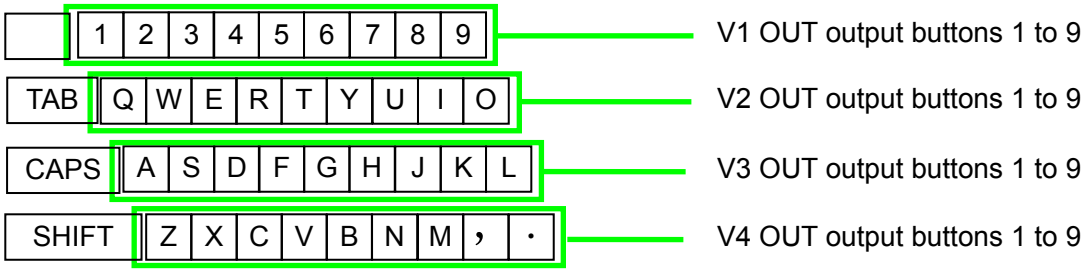


(3) The selected channel is reset to factory default as shown below. In this example, V1 OUT is reset.

Button No.	1	2	3	4	5	6	7	8	9
Signal name	CAM	CK	CK KEY	CG	CG KEY	MIX	MIX KEY	STILL	STILL KEY

3-3-8. Output Switching using Keyboard

The mixer outputs can be switched using a keyboard instead of the output buttons. To do so, move the mouse cursor to anywhere on the MBP-12GUI window, and press a key on the keyboard that is corresponding to a output button while pressing both right and left buttons of the mouse. The output is switched to the signal that is assigned to the corresponding output button. The relations between the keys and output buttons are shown below.


1 2 3 4 5 6 7 8 9
V1 OUT output buttons 1 to 9
TAB
Q W E R T Y U I O
V2 OUT output buttons 1 to 9
CAPS
A S D F G H J K L
V3 OUT output buttons 1 to 9
SHIFT
Z X C V B N M , .
V4 OUT output buttons 1 to 9

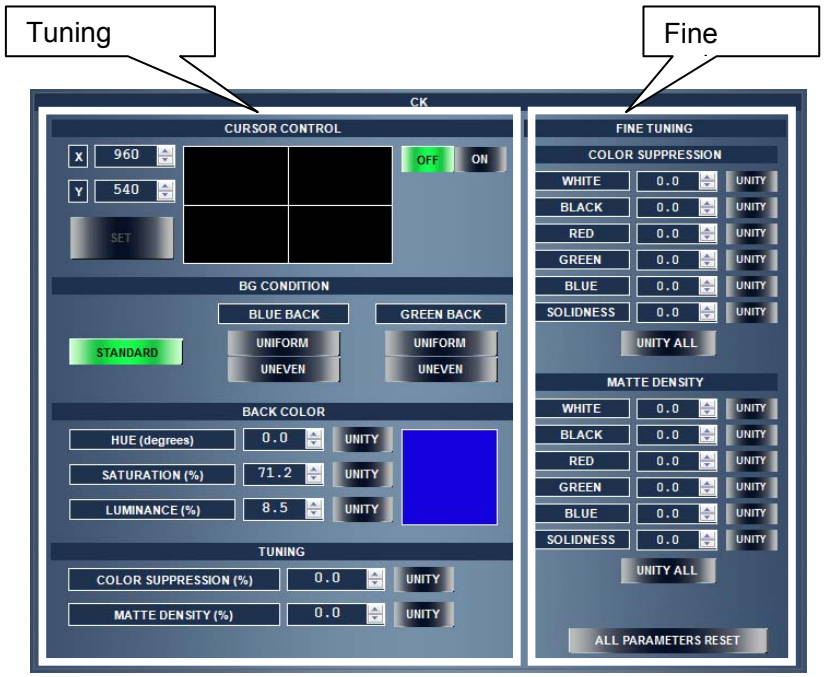
The nine keys from the left of the keyboard's top row are corresponding to the output buttons of V1 OUT. The nine keys from the left of the second row from the top are corresponding to the output buttons of V2 OUT. In the same manner, the nine keys of the third row from the top are for V3 OUT, and the nine keys of the fourth row from the top are for V4 OUT. Each key of nine keys from the left are corresponding to output buttons 1 through 9.
For example, the key "1" is corresponding to CAM of V1 OUT, and the key "W" is corresponding to CK of V2 OUT in the factory default. The output will not be switched if a key whose corresponding output button is not assigned any signal or is disabled is pressed.

This function is convenient to switch outputs quickly.

IMPORTANT
This function is supported only for QWERTY keyboards.

3-4. CK (Not Available in MBP-12GUILE)

CK allows you to set the chromakey settings. This item is disabled if **MBP-12CK** (optional) is not installed in the main unit.
MBP-12GUI allows you to switch between the chromakey setting screens of up to 4 cameras, which are assumed to be connected to MBP-1244 through a routing switcher. To switch between cameras, use the **CAM** buttons, previously described in section 2-2. (4). The settings are applied to the currently selected camera only. To apply the same settings to multiple cameras, use **COPY (CAM)**, described in section 3-12. “COPY (CAM).”
First tune the settings on the left of the screen, and then fine-tune the settings in the right of the screen as necessary.

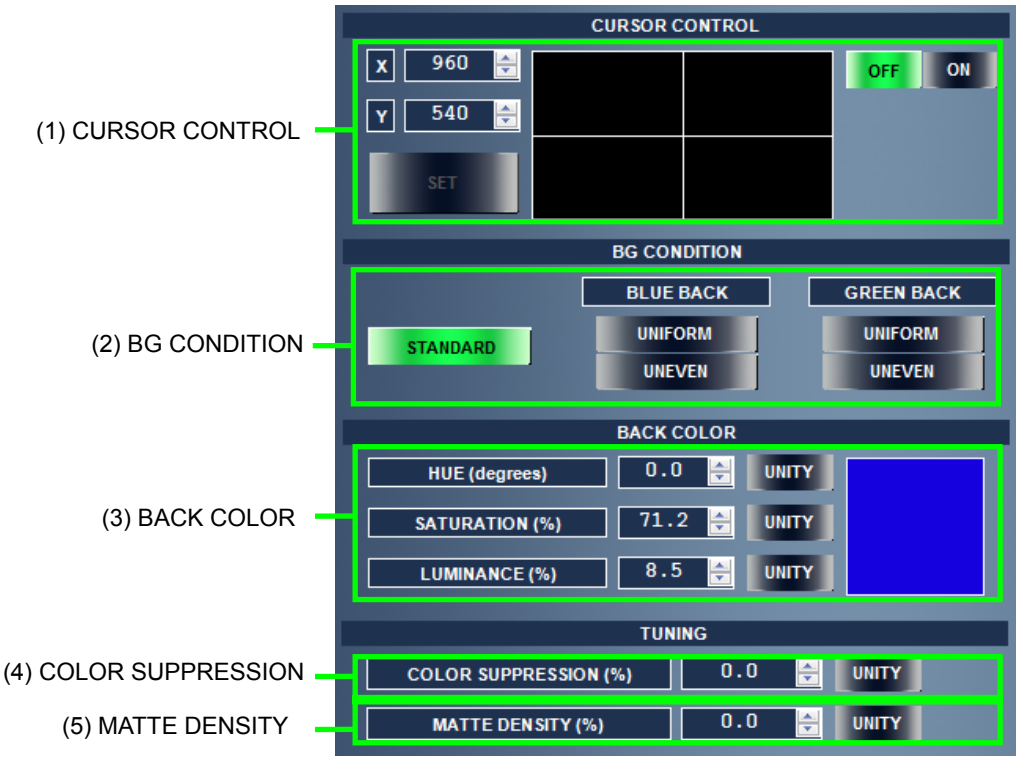


The chromakey is set using the four tuning settings, two fine tuning settings, and option switch settings described in section 3-5 “CK OPTION.”

3-4-1. Tuning

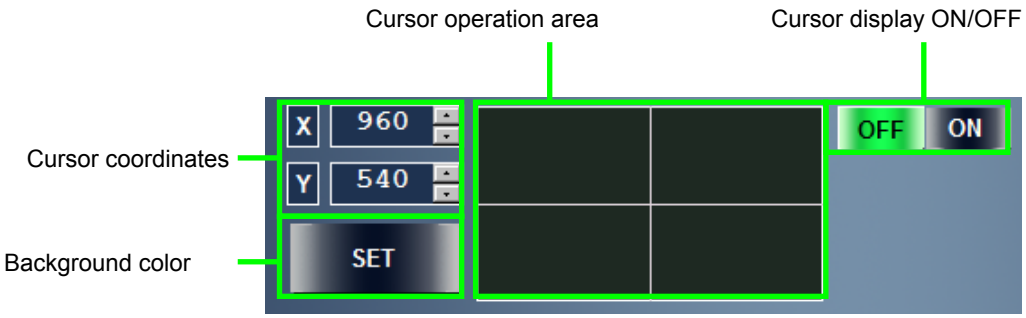
The following four items are available.

Item	Description
BG Condition	For selecting the color and the condition of the actual backing color to select the most suitable chromakeying mode. Selecting a proper mode enables to generate more appropriate matte (key) signal and foreground video.
BACK COLOR	A base color for generating the matte (key) signal. Set to blue if your background is blue, or to green if your background is green. It is normally set with the cursor in the **CK** menu. **BACK COLOR** is defined with the three parameters: **Hue**, **Saturation**, and **Luminance**. Each parameter can be adjusted separately.
COLOR SUPPRESSION	For generating the foreground video image. Allows you to suppress the backing color of the input video image. Increasing the value increases the suppression, and decreasing the value decreases the suppression.
MATTE DENSITY	For generating the matte (key) signal. Allows you to adjust the matte density for the colors similar to the backing color. Increasing the value increases the density, and decreasing the value decreases the density.



(1) CURSOR CONTROL

Displays a cursor on the output image for sampling a background color from the input video image.



1. In the cursor operation area, hold down the left mouse button. If the cursor is turned off, it is automatically turned on and the cursor is displayed. Note that the cursor is displayed on the channels that **CURSOR SHOW CH**, described in section 3-1. (3), is set to **ON** only.
2. Dragging while holding down the left mouse button moves the cursor and turns the color of the cursor operation area to the color of the position of the cursor on the input video signal. It is no matter if the cursor goes outside the cursor operation area.

NOTE
The color of the cursor operation area is updated every 0.5 seconds while the cursor is turned on.

3. Release the left mouse button on the color you wish to set for **BACK COLOR**. The color of the position where the button is released is set for **BACK COLOR**. The cursor is turned off automatically and the cursor position is returned to the position where the mouse is started to drag. In addition, right-clicking while holing down the left mouse button turns off the cursor without setting **BACK COLOR**.

NOTE
The color set for **BACK COLOR** is “the color of the position where the cursor is placed when the button is released.” The color of the cursor operation area is updated slower than the color of the input video signal, therefore the actual color set for **BACK COLOR** may be differs from the color of the cursor operation area when the button is released.

4. The other method for setting **BACK COLOR**, other than by dragging the mouse, is to turn on the cursor, set the **X** and **Y** coordinates of the cursor by entering the values directly into the box or using the ▲ and ▼ buttons, and then click the **SET** button. The color of the cursor position is set for **BACK COLOR**. In this case, the cursor remains displayed and it is not automatically turned off.

(2) BG CONDITION

Allows you to generate the proper matte (key) signal and foreground video by selecting a condition of the chromakey backing color.

Mode		Description
STANDARD		Standard setting
BLUE BACK	UNIFORM	Even blue background
	UNEVEN	Uneven blue background
GREEN BACK	UNIFORM	Even green background
	UNEVEN	Uneven green background

The description above are only guide lines. Please check the created images as you select the modes.

(3) BACK COLOR

Allows you to adjust the **HUE**, **SATURATION**, and **LUMINANCE** parameters of **BACK COLOR**, set with the previous item, as necessary. Enter the value directly into the box or use the ▲ and ▼ buttons to change the value. The current **BACK COLOR** is displayed on the right. Click the **UNITY** button to reset the value to the last value set by dragging the mouse or clicking the **SET** button. The setting range for each parameter is as below.

Parameter	Setting Range
HUE	0 to 359.5 (degree)
SATURATION	0 to 100 (%)
LUMINANCE	0 to 109 (%)

(4) COLOR SUPPRESSION

Allows you to set **COLOR SUPPRESSION** in the range from **-100%** to **+100%**. Enter the value directly into the box or use the ▲ and ▼ buttons to adjust the value. Click the **UNITY** button to reset the value to **0**.

(5) MATTE DENSITY

Allows you to set **MATTE DENSITY** in the range from **-100%** to **+100%**. Enter the value directly into the box or use the ▲ and ▼ buttons to adjust the value. Click the **UNITY** button to reset the value to **0**.

3-4-2. Fine Tuning

The following two items are available.

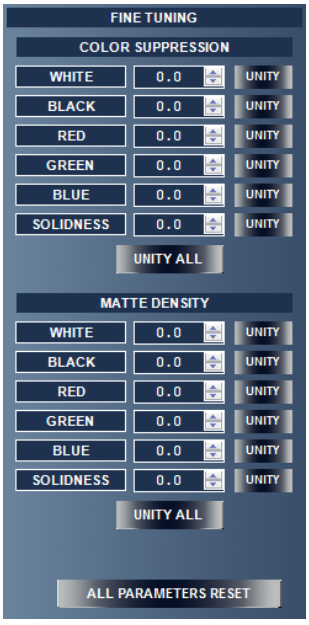
Item	Description	
COLOR SUPPRESSION FINE TUNING	Allows you to fine tune **COLOR SUPPRESSION**.	
	WHITE	Allows you to suppress the white (brightness) component of the backing color.
	BLACK	Allows you to suppress the black (darkness) component of the backing color.
	RED	Allows you to suppress the red component of the backing color.
	GREEN	Allows you to suppress the green component of the backing color.
	BLUE	Allows you to suppress the blue component of the backing color.
	SOLIDNESS	Allows you to adjust the solidness of edges.
MATTE DENSITY FINE TUNING	Allows you to fine tune **MATTE DENSITY**.	
	WHITE	Allows you to adjust the density of the matte generated with the white (brightness) component.
	BLACK	Allows you to adjust the density of the matte generated with the black (darkness) component.
	RED	Allows you to adjust the density of the matte generated with the red component.
	GREEN	Allows you to adjust the density of the matte generated with the green component.
	BLUE	Allows you to adjust the density of the matte generated with the blue component.
	SOLIDNESS	Allows you to adjust the solidness of edges.

(1) COLOR SUPPRESSION FINE TUNING

Enter the value directly into each box or use the ▲ and ▼ buttons to adjust each value. Click the **UNITY** button of each item to reset the value to **0**. Clicking **UNITY ALL** resets all six values to **0**.

(2) MATTE DENSITY FINE TUNING

Enter the value directly into each box or use the ▲ and ▼ buttons to adjust each value. Click the **UNITY** button of each item to reset the value to **0**. Clicking **UNITY ALL** resets all six values to **0**.



(3) ALL PARAMETERS RESET

Resets all chromakey settings (including the optional switch settings described in the following section). A confirmation message is displayed when the button is clicked. Click **OK** to reset the settings to the values shown in the following table.

Item	Default Setting
Cursor display	OFF
Cursor position	Center of screen
BG CONDITION	STANDARD
HUE	0
SATURATION	71.2
LUMINANCE	8.5
COLOR SUPPRESSION	0
MATTE DENSITY	0
COLOR SUPPRESSION FINE TUNING	0 (all values)
MATTE DENSITY FINE TUNING	0 (all values)

3-5. CK OPTION (Not Available in MBP-12GUILE)

CK OPTION allows you to set the optional switches for chromakey. Making the appropriate switch settings depending on the image type enables you to obtain more natural results. The items available are shown below. Each button can be toggled on and off.

(1) FG (foreground)

Item	Description	Default Setting
Color Suppression	Allows you to turn on and off COLOR SUPPRESSION (removing the backing color). Turning off this switch disables all COLOR SUPPRESSION settings in TUNING and FINE TUNING.	ON
Light & Darkness Emphasis	Allows you to enhance the brightness and darkness. Using the luminance value of the backing color, it brightens the bright (white) part brighter and darkens the dark (black) part darker. For example, darkens the black mustache brightened by lighting, or brightens the white smoke darkened by the reflection of the backing color.	OFF
Recursive Filter	Allows you to turn on and off Recursive Filter, effective for reducing flicker noise. It compares the image between frames, and filters the data with a lower difference value to reduce the flicker noise.	ON
Edge Replace Left	Allows you to replace the color of the left edge of an object with its inner adjacent color. For example, replaces the color of the edge brightened (whitened) by lighting, or the edge darkened (blackened) by the lens aberration of the camera to obtain a more natural result.	ON
Edge Replace Right	Allows you to replace the color of the right edge of an object with its inner adjacent color.	ON
Edge Replace Top	Allows you to replace the color of the top edge of an object with its inner adjacent color.	ON
Edge Replace Bottom	Allows you to replace the color of the bottom edge of an object with its inner adjacent color.	ON

(2) MATTE

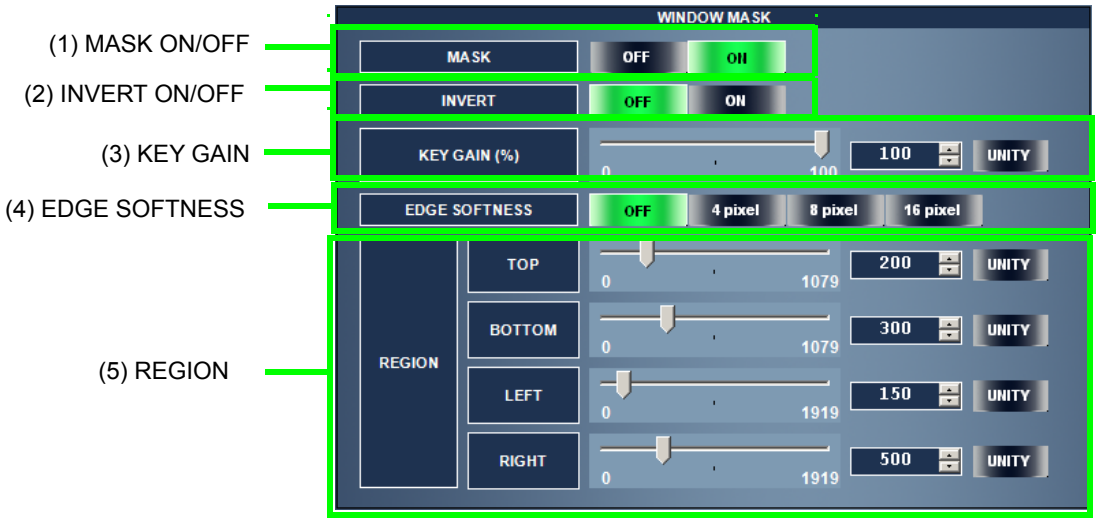
Item	Description	Default Setting
Post Filter V	Allows you to turn on and off the low path filter for vertical direction implemented in the final step of generating mattes. Set to **ON** for smoothing the vertical edges of mattes and reduces the flicker noise. Set to **OFF** for sharpening edges.	ON
Post Filter H	Allows you to turn on and off the low path filter for horizontal direction implemented in the final step of generating mattes. Set to **ON** for smoothing the vertical edges of mattes and reduces the flicker noise. Set to **OFF** for sharpening edges.	ON
Recursive Filter	Allows you to turn on and off Recursive Filter, effective for reducing flicker noise. It compares the image between frames, and filters the data with a lower difference value to reduce the flicker noise.	ON
Luminance Coring	Allows you to turn on and off the filter effective for reducing the luminance noise. It reduces the low level of noise by forcibly setting the low level of the matte signal generated with the luminance component to **0**.	OFF
Red Coring	Allows you to turn on and off the filter effective for reducing the red noise. It reduces the low level of noise by forcibly setting the low level of the matte signal generated with the red component to **0**.	OFF
Blue Coring	Allows you to turn on and off the filter effective for reducing the blue noise. It reduces the low level of noise by forcibly setting the low level of the matte signal generated with the blue component to **0**.	OFF
Green Coring	Allows you to turn on and off the filter effective for reducing the green noise. It reduces the low level of noise by forcibly setting the low level of the matte signal generated with the green component to **0**.	OFF
Edge Shrink Left	Allows you to set whether or not to shrink the left edge of the matte signal. A more natural result is obtained by shrinking (narrowing) the matte signal.	OFF
Edge Shrink Right	Allows you to set whether or not to shrink the right edge of the matte signal. A more natural result is obtained by shrinking (narrowing) the matte signal.	OFF
Edge Shrink Top	Allows you to set whether or not to shrink the top edge of the matte signal. A more natural result is obtained by shrinking (narrowing) the matte signal.	OFF
Edge Shrink Bottom	Allows you to set whether or not to shrink the bottom edge of the matte signal. A more natural result is obtained by shrinking (narrowing) the matte signal.	OFF
White Mode	If the background color is white or black, set this item to **ON**. When **White Mod**e is turned on, **White** and **Black** in **Color Suppression Fine Tuning** and **Matte Density Fine Tuning**, and **Luminance Coring** in **CK Option** are disabled.	OFF

3-6. WINDOW MASK (Not Available in MBP-12GUILE)

Window Mask, for masking a specific area of the camera image, can be generated in the main unit. Although **Window Mask** is not synchronized with the camera movements, it can be used for fixed camera without using an external mask image.

NOTE
Window Mask is applied to the key signal of the chromakey only.

The **Window Mask** setting is saved for each camera separately. When the camera is switched, the **Window Mask** setting is also switched.



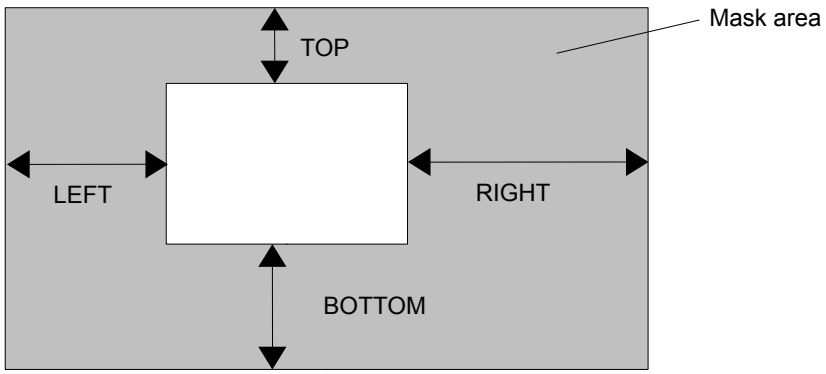
(1) MASK ON/OFF
Allows you to turn on and off **Window Mask**. Setting this item to **OFF** disables items (2), (3), (4), and (5) described below.

(2) INVERT ON/OFF
Allows you to set whether or not to invert the generated key signal.

(3) KEY GAIN
Allows you to set the gain of the mask in the range from **0%** to **100%**. Clicking the **UNITY** button resets the value to **100%**.

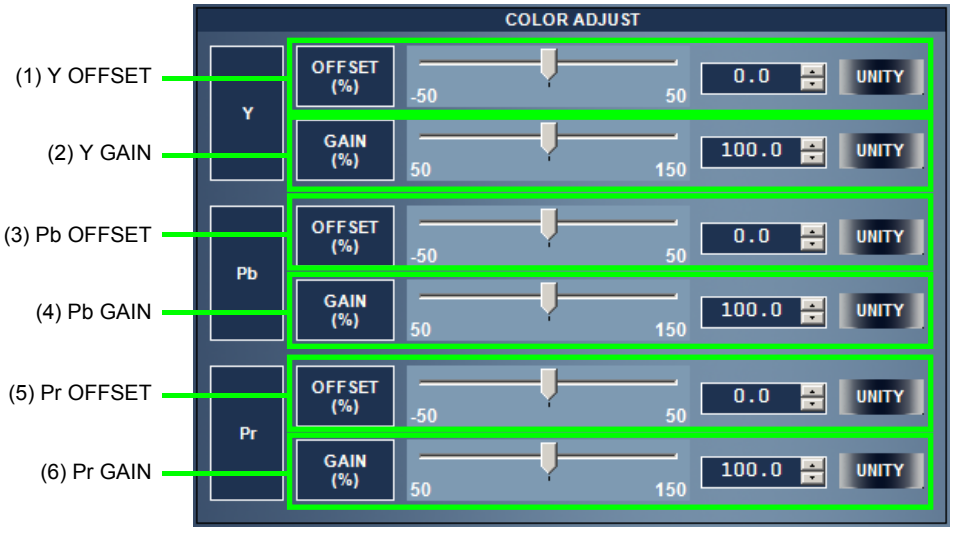
(4) EDGE SOFTNESS
Allows you to soften the edge of the mask. It softens the specified number of pixels.

(5) REGION
Allows you to set the mask area. **TOP** and **BOTTOM** are adjusted by lines, and **LEFT** and **RIGHT** are adjusted by pixels. The value for each item is measured from the edge of the screen. The maximum allowable value differs depending on the TV standard.



3-7. COLOR ADJUST (Not Available in MBP-12GUILE)

COLOR ADJUST allows you to adjust the level of the CK output of the MBP-12CK option. **Offset** and **Gain** of the Y, Pb, and Pr signals of the chroma-keyed foreground image can be adjusted. The **COLOR ADJUST** setting is saved for each camera separately. When the camera is switched, the **COLOR ADJUST** setting is also switched.



(1) Y OFFSET

Allows you to adjust **Offset** of the Y signal of the chroma-keyed foreground image by **0.1%** in the range from **-50.0%** to **50.0%**. Clicking the **UNITY** button resets the value to **0%**.

(2) Y GAIN

Allows you to adjust **Gain** of the Y signal of the chroma-keyed foreground image by **0.1%** in the range from **50.0%** to **150.0%**. Clicking the **UNITY** button resets the value to **100%**.

(3) Pb OFFSET

Allows you to adjust **Offset** of the Pb signal of the chroma-keyed foreground image by **0.1%** in the range from **-50.0%** to **50.0%**. Clicking the **UNITY** button resets the value to **0%**.

(4) Pb GAIN

Allows you to adjust **Gain** of the Pb signal of the chroma-keyed foreground image by **0.1%** in the range from **50.0%** to **150.0%**. Clicking the **UNITY** button resets the value to **100%**.

(5) Pr OFFSET

Allows you to adjust **Offset** of the Pr signal of the chroma-keyed foreground image by **0.1%** in the range from **-50.0%** to **50.0%**. Clicking the **UNITY** button resets the value to **0%**.

(6) Pr GAIN

Allows you to adjust **Gain** of the Pr signal of the chroma-keyed foreground image by **0.1%** in the range from **50.0%** to **150.0%**. Clicking the **UNITY** button resets the value to **100%**.

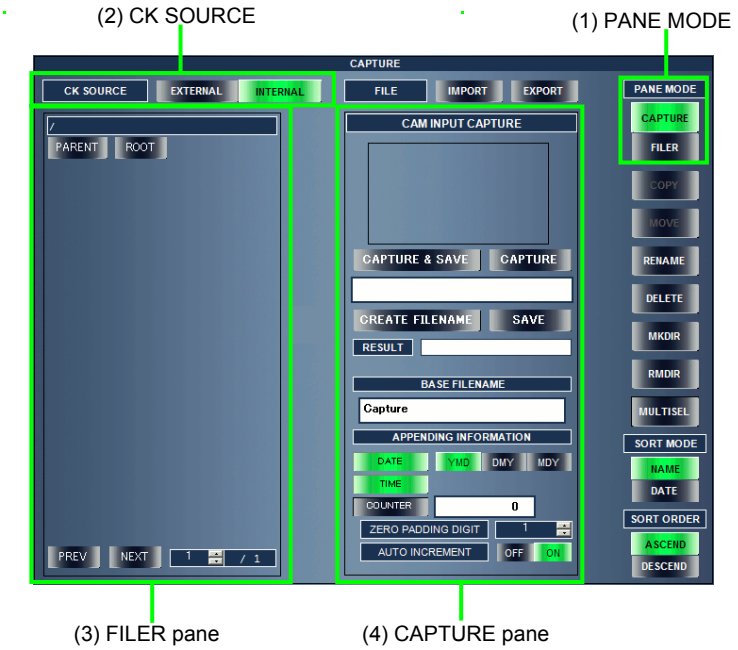
3-8. CAPTURE (MBP-100CK Only)

The MBP-100CK has a function for capturing still images from the external camera image. The captured image can be used as the camera input signal. **CAPTURE** allows you to capture images from the external camera, and load, copy, and delete captured image files.

On the MBP-100CK, still images can be assigned as the input signals to the mixer.

3-8-1. Capturing a Still Image from an External Camera (Basics)

Selecting the **CAPTURE** menu displays the following items.



(1) PANE MODE

Allows you to switch between the pane modes. In the example above, **CAPTURE** is selected.

CAPTURE	Allows you to capture images from an external camera.
FILER	Allows you to copy and move files between directories. See section 3-8-8. “Copying and Moving Files Between Directories” for details.

(2) CK SOURCE

Allows you to switch the input source for CK. The CAM signal assigned to the mixer is switched at the same time.

EXTERNAL	External camera (signal input to the CAMERA INPUT connector)
INTERNAL	Internally generated still image (captured image)

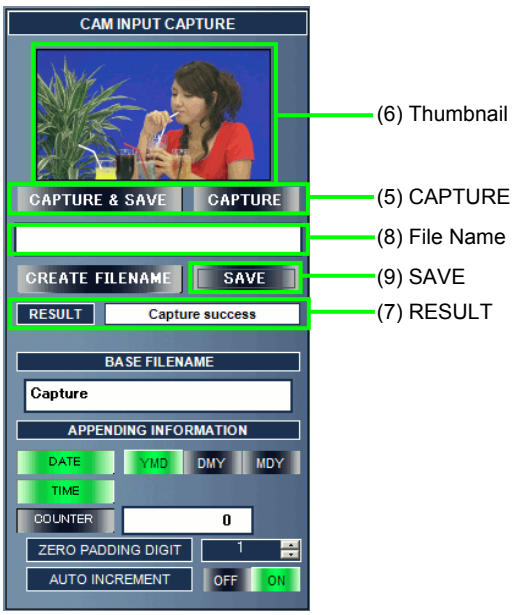
(3) FILER pane

Displays the file information of the saved captured images. At the initial state, no file exists and this pane is empty.

(4) CAPTURE pane

Allows you to capture images.

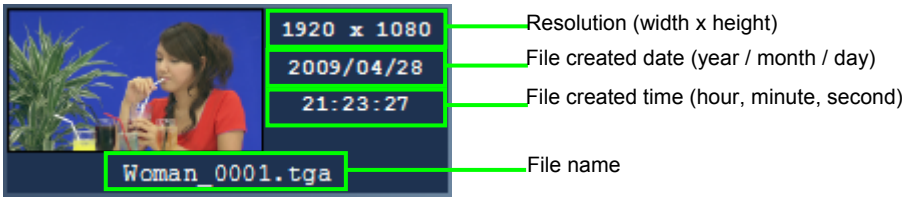
1. Select **EXTERNAL** in **CK SOURCE** (2). Select **CAM** for the **MIXER** output, and confirm that the camera image you wish to capture an image from is input.
2. Click **CAPTURE** (5) in the **CAPTURE** pane (4). If the capturing is successfully complete, a thumbnail of the captured image (6) is displayed and “**Capture success**” is displayed in **RESULT** (7). The image is not saved as a file at this point.



3. If you wish to recapture the image, just click **CAPTURE** (5) again. To save the captured image, enter the file name in the text box (8) and click **SAVE** (9). Only single-byte alphanumeric characters, spaces, hyphens, and underscores are allowed. Please do not use other symbols or double-byte characters.

4. If the file is successfully saved, "**Save success**" is displayed in **RESULT** (7) and the saved file is added in the **FILER** pane (10). The captured image is saved as a 24-bit Targa file. The file extension ".tga" is added automatically. In the example below, **"Woman_0001"** is entered in the text box. If a file with the same name already exists, the saving fails and **"Save fail"** is displayed in **RESULT** (7).

The following file information is displayed in **FILER** pane.



3-8-2. Capturing a Still Image from an External Camera (Advanced)

3-8-2-1. File Name Auto-Generation

Auto-generating file names is possible by specifying the base of the file name and other information. Clicking the **CREATE FILENAME** button generates a file name using the information described below and displays the file name in the text box.

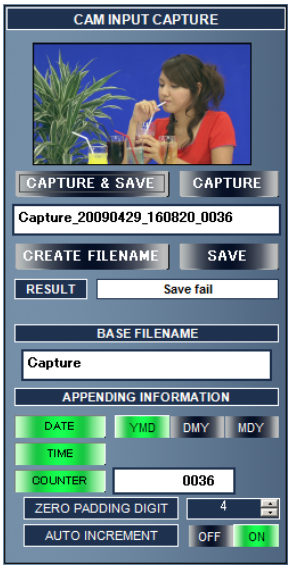
NOTE
Just clicking the **CREATE FILENAME** button does not save the file. To save the file, confirm the file name generated and click the **SAVE** button.

The **DATE**, **TIME** and **COUNTER** buttons are toggled on and off each time they are clicked, and whether or not to add the information to the file name can be specified.

Item	Description	Note
BASE FILENAME	Allows you to specify the base of the file name. This character string is added to the beginning of the file name. You can also leave this text box empty.	The default name is "**Capture**."
DATE (can be turned on and off)	Allows you to add the current date to the file name. The following three orders of year, month, and day are available. **YMD:** year, month, day (default) **DMY:** day, month, year **MDY:** month, day, year	If the date is April 29, 2009, the following character string is added: **YMD:** 20090429 **DMY:** 29042009 **MDY:** 04292009
TIME (can be turned on and off)	Allows you to add the current time to the file name in the order of hour, minute, and second. This is fixed to the 24-hour time notation.	If the time is 16:08:20, the following character string is added: 160820
COUNTER (can be turned on and off)	A decimal counter that allows you to set a given value. **ZERO PADDING DIGIT** allows you to set the number of digits of the counter. Setting **AUTO INCREMENT** to **ON** increments the **COUNTER** value each time the **SAVE** button is clicked.	If **COUNTER** is **12**, and **ZERO PADDING DIGIT** is **6**, the following character string is added. 000012

Example:
If the settings are as shown below, a file name **"Capture_20090429_160820_0036"** is generated.

BASE FILENAME: Capture
DATE: ON (YMD) (April 29, 2009)
TIME: ON (16:08:20)
COUNTER: ON (36)
ZERO PADDING DIGIT: 4



- Capturing Still Images with Sequentially Numbered File Names

  The **CAPTURE & SAVE** button works exactly the same as clicking **CAPTURE > CREATE FILENAME > SAVE**. Turning on **TIME**, or **COUNTER** and **AUTO INCREMENT** in advance and clicking the **CAPTURE & SAVE** button enables you to easily capture images with sequentially numbered, different file names using only one button.

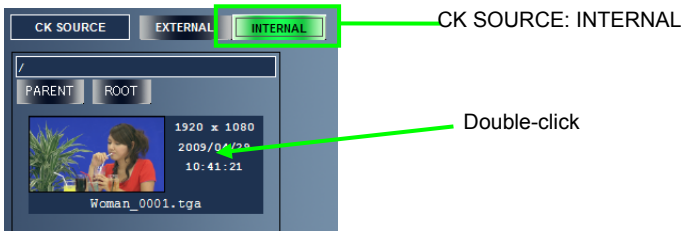
IMPOTANT
Although if the captured image is saved through MBP-12GUI preinstalled on the MBP-100CK, there may be about a second difference between when the information is added to the file name and when the file is created. This is due to the time lag between when the file saving is started and finished, and it is not an error. The date and time information added to the file name is generated based on the computer where MBP-12 GUI is running. If you control the MBP-100CK through MBP-12GUI installed on another computer, the difference of the time between the computer and the MBP-100CK is directly applied to the time added to the file name.

3-8-3. Loading a Captured Still Image

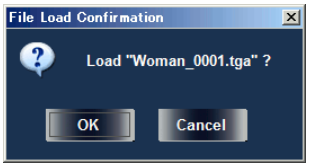
A captured still image can be loaded and used as an internally generated camera image instead of an external camera image.

NOTE
Just saving a captured image as described previously does not output the image as the internally generated camera image. To output the captured image, please load the file.

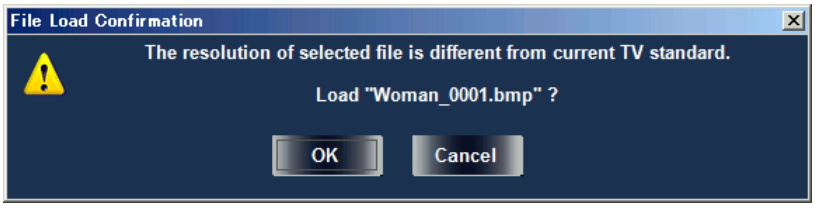
1. Change **CK SOURCE** to **INTERNAL**. Select **CAM** for the **MIXER** output and confirm that the internal camera image (appears solid black if the MBP-100CK is just booted), instead of the external camera image, is output.



2. In the **FILER** pane, double-click the file you wish to load. A confirmation message is displayed. Click **OK** to load the file. Confirm the image is output properly.



3. If the resolution of the double-clicked file differs from the resolution of the TV standard currently specified in the main unit, a confirmation message is displayed.



If you wish to load the file, click **OK**. The loaded image is processed as described below.

If the resolution of the loaded file is smaller than the resolution specified on the main unit:	The image is centered on the screen. The space around the image appears black.
If the resolution of the loaded file is greater than the resolution specified on the main unit:	The center of the image is centered on the screen. The image outside the screen is clipped.

NOTE
The aspect ratio of the image is not corrected in either case.

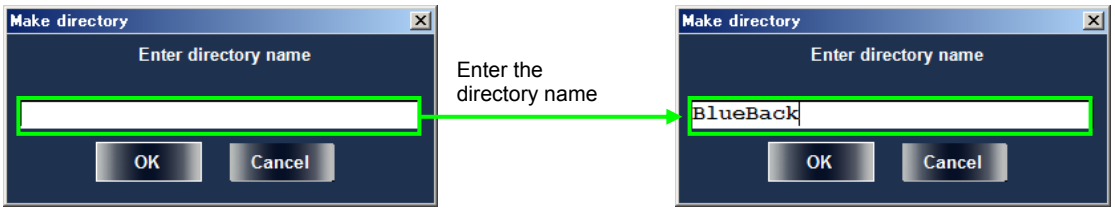
3-8-4. Directories

The captured still image files are saved in a dedicated directory on the MBP-100CK. You can create sub-directories inside this directory and categorize the files. You can also create sub-sub-directories inside the sub-directories to organize the files. Just after startup, the root directory is selected. Hereafter, sub-directory is simply referred to as “directory.”

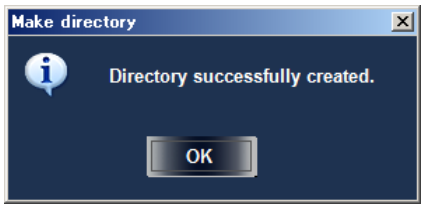
3-8-4-1. Creating a Directory

1. Click the **FILER** pane to activate it. The color of border around the **FILER** pane changes to green.

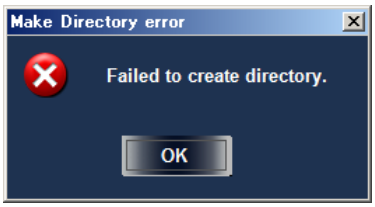
2. Click **MKDIR** (make directory). A dialog box is displayed. Enter the directory name and click **OK**. In the example below, “**BlueBack**” is entered.



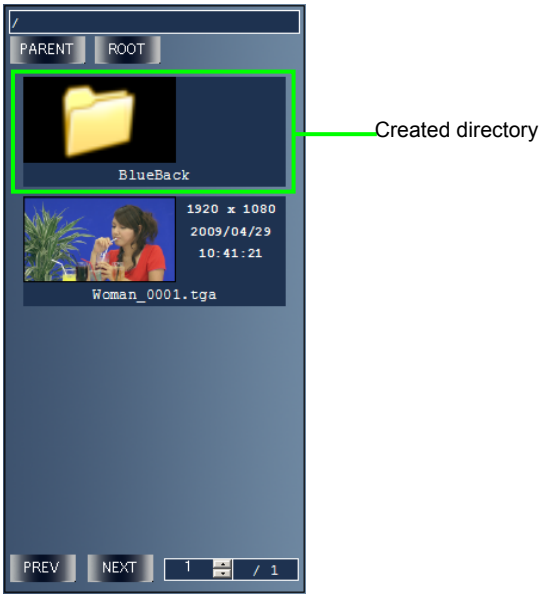
3. If the directory is successfully created, a message as shown below is displayed.



4. If the entered directory name already exists, creating the directory fails and an error message is displayed.

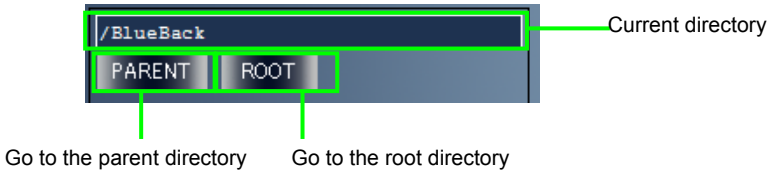


5. The created directory is displayed in the **FILER** pane with the icon as shown below.



3-8-4-2. Moving Between Directories

1. Double-click the directory icon in the **FILER** pane to go to its subdirectories. The currently selected directory is displayed at the top of the **FILER** pane.



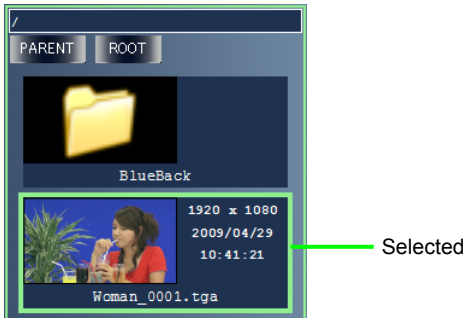
2. To go to the parent directory (one level up), click **PARENT**. To go to the root directory, click **ROOT**.

3-8-4-3. Saving a Captured Image to a Directory

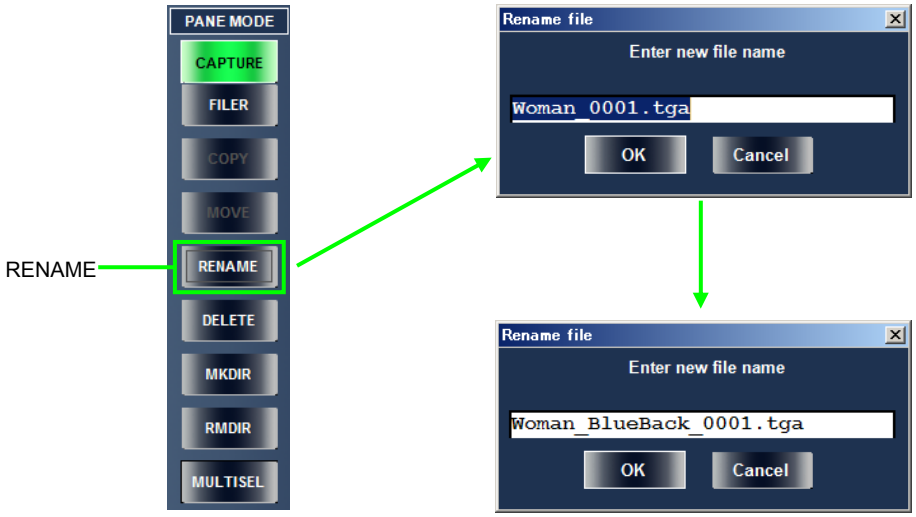
In the **FILER** pane, go to the directory where you wish to save an image, then save the file using the **CAPTURE** pane. The file is saved to the directory currently selected in the **FILER** pane.

3-8-5. Renaming a File

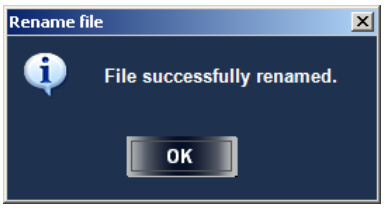
1. In the **FILER** pane, click to select the file you wish to rename. The color of border around the file changes to green. The selection is toggled on and off each time it is clicked.



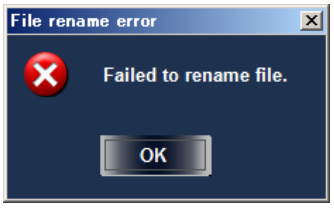
2. Click the **RENAME** button on the right of the screen. A dialog box for entering the new name is displayed. The default name is shown in the dialog box. Enter the new name and click **OK**. In the example below, the file name is changed from "**Woman_0001.tga**" to "**Woman_BlueBack_0001.tga**."



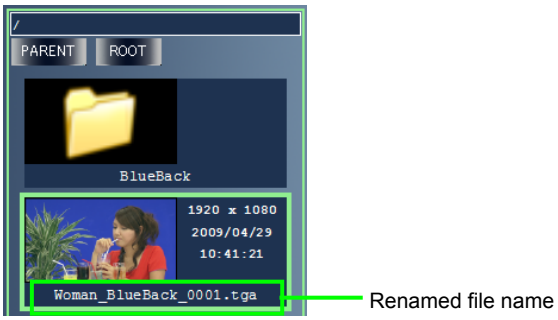
3. If the file is successfully renamed, the following message is displayed. Click **OK**.



4. If the entered file name already exists, renaming the file fails and an error message is displayed.



5. The file name displayed in the **FILER** pane is updated.

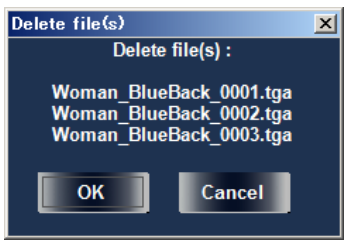


NOTE
Renaming directories is not possible.

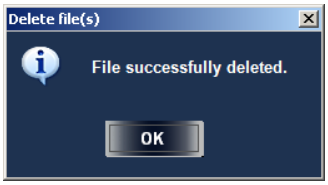
3-8-6. Deleting Files

1. In the **FILER** pane, click to select the file you wish to delete. Selecting multiple files while **MULTISEL** (multi select) is turned on enables you to select multiple files. The selection of each file is toggled on and off each time it is clicked.

2. Click the **DELETE** button. A confirmation message is displayed. Click **OK** to delete the file.



3. If the file is successfully deleted, a message as shown below is displayed. Click **OK**.



3-8-7. Removing Directories

1. In the **FILER** pane, click to select the directory you wish to remove. It is possible to remove multiple directories at once in the same manner as files.

2. Click the **RMDIR** (remove directory) button. A confirmation message is displayed. Click **OK** to remove the directory.

3. If the directory is successfully removed, a message is displayed. Click **OK**.

IMPORTANT
All files and sub-directories within the removed directory are deleted.

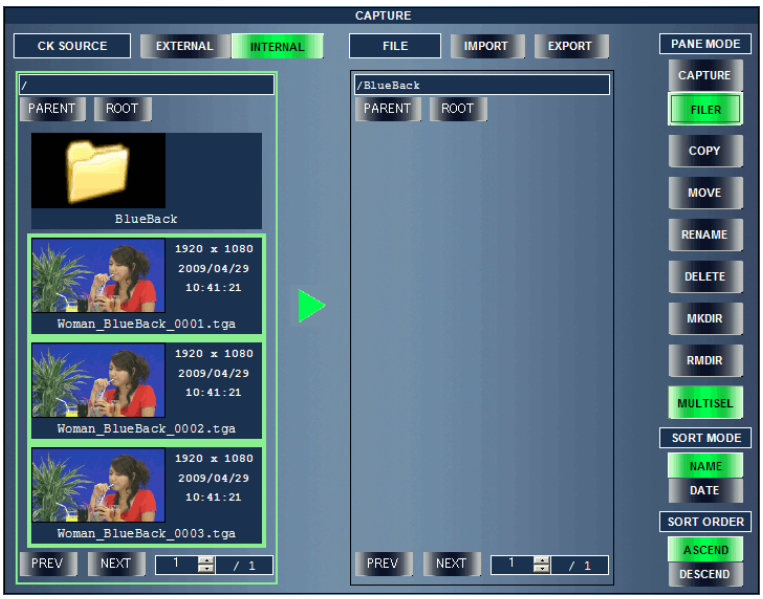
3-8-8. Copying and Moving Files Between Directories

Files can be copied or moved between directories.

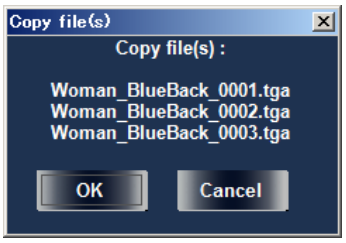
1. Select **FILER** in **PANE MODE** on the right of the screen to change the pane mode to the **FILER** mode. Both panes change to **FILER**.

2. Select a source directory for one of two panes, and select a destination directory for the other pane. See section 3-8-4-2. “Moving Between Directories” for details on moving between directories. In the example below, the root directory is set for the left pane for the source directory, and **/BlueBack** is set for the right pane for the destination directory. The **COPY/MOVE** button is enabled only if a different directory is set for the left pane and the right pane. Files cannot be copied or moved in the same directory.

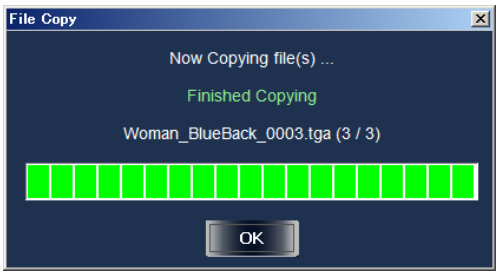
3. In the source directory, select the file you wish to copy or move. The **MULTISEL** mode enables you to copy or move multiple files at once. Selecting the source files displays an arrow between the two panes. The activated pane is for the source directory, and other is for the destination directory.



4. To copy or move the files, click **COPY** or **MOVE**. A confirmation message is displayed. Click **OK** to copy or move the files. In the example below, **COPY** is clicked.



5. A progress bar is displayed. If the files are successfully copied or moved, "**Finished copying.**" is displayed. Click **OK**.



6. If the file with the same name already exists, a confirmation message for overwriting the file is displayed. Click **OK** to overwrite the file. To close the dialog box without overwriting the file, click **Cancel**.

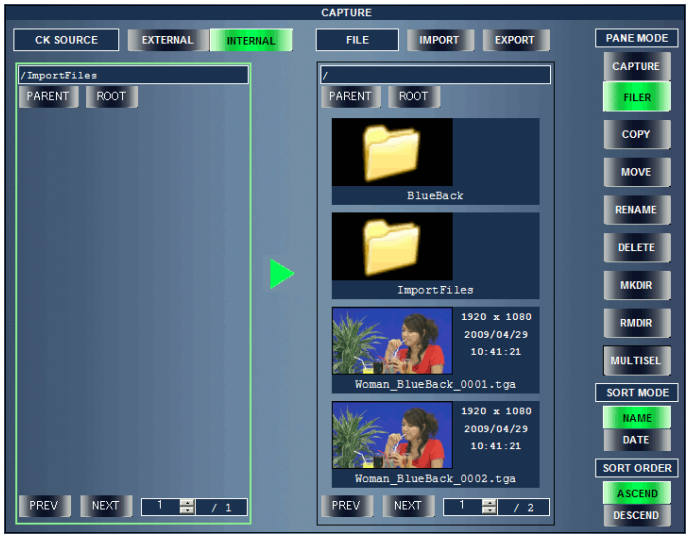
Overwrite confirm
"Woman_BlueBack_0001.tga" already exists.
Do you want to replace the existing file?
(Click Cancel to close the dialog box without overwriting the file.)
OK
Cancel

3-8-9. Importing Files

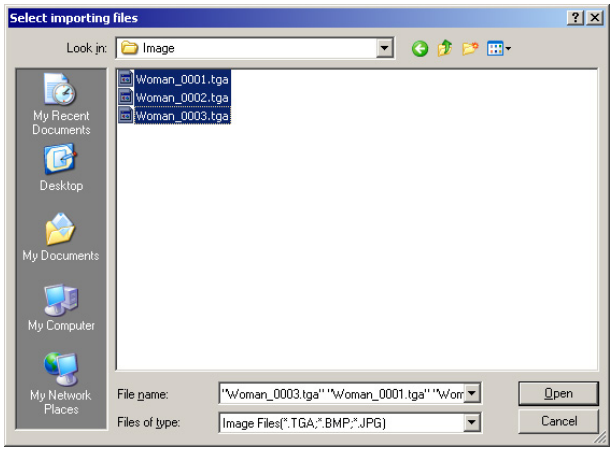
Not only the still images captured on the MBP-100CK, the still images created on the computer can also be imported into the MBP-100CK and used as the internally generated camera image. The resolution for each TV standard is as shown below.

TV Standard	Width (pixel)	Height (pixel)
525/60	720	486
625/50	720	576
1080i, 1080p, 1080PsF	1920	1080
720p	1280	720

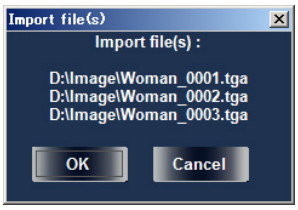
1. In the **FILER** pane, select the source directory and click to activate the **FILER** pane. In the example below, **/ImportFiles** is selected for the source directory in the left pane.



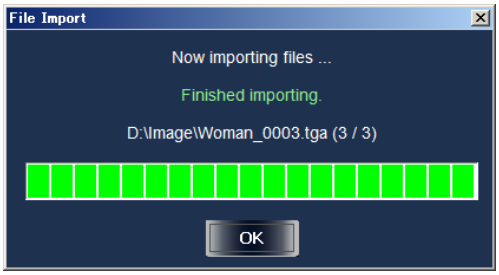
2. Click **IMPORT**. A dialog box is displayed. Select files to import. The image file formats supported are: **MBP**, **TGA**, and **JPG**. In the example below, "**Woman_0001.tga**," "**Woman_0002.tga**," and "**Woman_0003.tga**" are selected.



3. Clicking **Open** after selecting files displays a confirmation message. Click **OK** to import the files.



4. A progress bar is displayed. If the files are successfully imported, "**Finished importing.**" is displayed. Click **OK**.



5. If the file with the same name already exists, a confirmation message for overwriting the file is displayed. Click **OK** to overwrite the file. To close the dialog box without overwriting the file, click **Cancel**.

Overwrite confirm
"Woman_0001.tga" already exists.
Do you want to replace the existing file?
(Click Cancel to close the dialog box without overwriting the file.)
OK
Cancel

NOTE
The date/time stamps of the imported files are updated when they are imported.

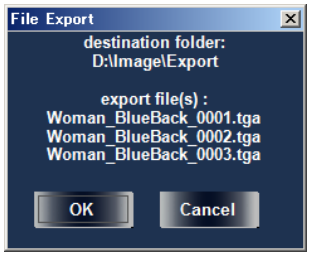
3-8-10. Exporting Files

The still image files captured on the MBP-100CK can be downloaded from the MBP-100CK and exported to the computer.

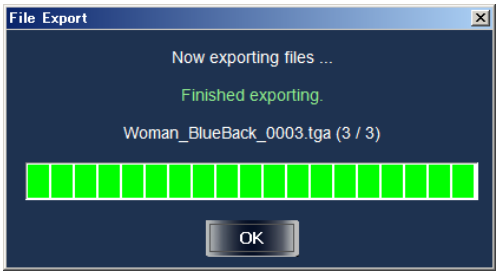
1. In the **FILER** pane, select the files you wish to export and click to activate its **FILER** pane. The **MULTISEL** mode enables you to export multiple files at once. In the example below, "**Woman_BlueBack_0001.tga**," "**Woman_BlueBack_0002.tga**," and "**Woman_BlueBack_0003.tga**" are selected in the left pane.

2. Clicking **EXPORT** after selecting files displays the **Browse for Folder** dialog box. Select the folder to save the files and click **OK**. In the example below, **D:\Image\Export** is selected.

3. A confirmation message is displayed. Click **OK** to export the files.



4. A progress bar is displayed. If the files are successfully exported, "**Finished exporting.**" is displayed. Click **OK**.



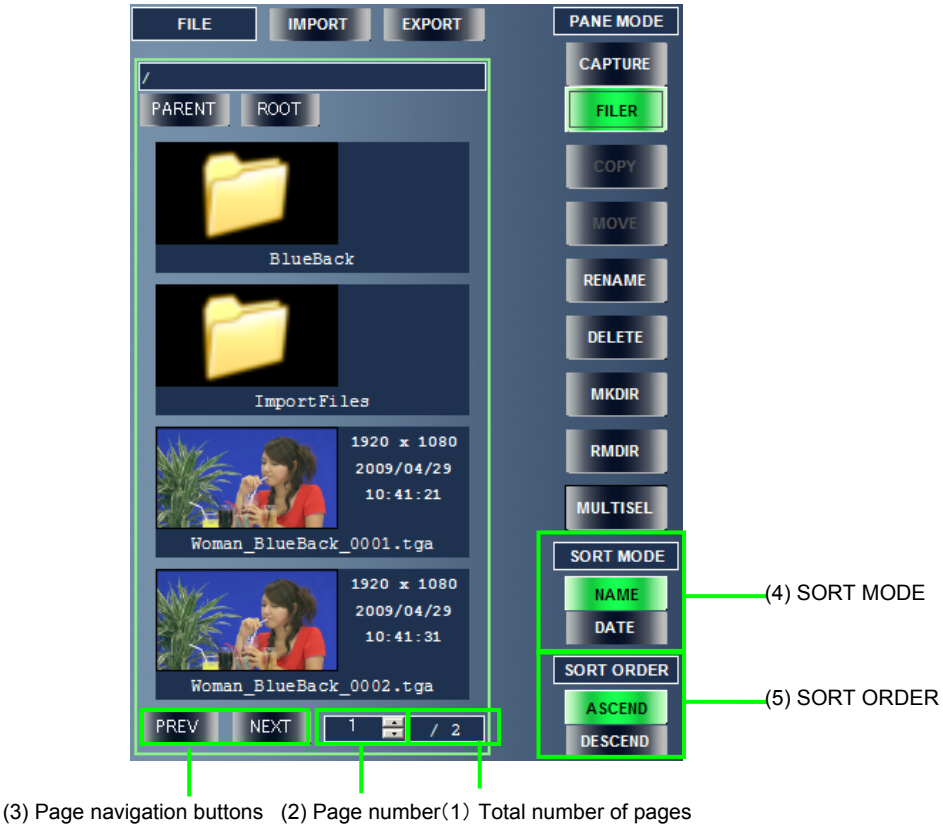
5. If the file with the same name already exists in the destination directory, a confirmation message for overwriting the file is displayed. Click **OK** to overwrite the file. To close the dialog box without overwriting the file, click **Cancel**.

Overwrite confirm
"Woman_BlueBack_0001.tga" already exists.
Do you want to replace the existing file?
(Click Cancel to close the dialog box without overwriting the file.)
OK
Cancel

NOTE
The date/time stamps of the exported files are updated when they are exported.

3-8-11. Viewing Items in FILER

In the **FILER** pane, up to four items are displayed per page. If there are more than four sub-directories or files, the items are split into pages. Directories and files are always sorted separately.



(1) Total Number of pages

For example, if there are two sub-directories and fifteen files, for a total of 17 items, the total number of pages is 5.

(2) Page number

Displays the page number of the currently displayed page and allows you to jump to the specific page. Enter the value directly into the box or use the ▲ and ▼ buttons to adjust the value. The value is updated when the page is changed using the page navigation buttons (3). The minimum value is 1 (first page) and the maximum value is the total number of pages (1) (last page).

(3) Page navigation buttons (PREV / NEXT)

Clicking **PREV** displays the previous page, and clicking **NEXT** displays the next page. If the minimum or maximum value is reached, it is returned to the maximum or minimum value. For example, clicking **PREV** while on the first page (page 1) displays the last page, and clicking **NEXT** while on the last page displays the first page (page 1).

(4) SORT MODE

Allows you to specify whether the files are sorted by name or date.

NAME	Files are sorted by name.
DATE	Files are sorted by date.

NOTE
Directories are always sorted by name (directory name) regardless of the **SORT MODE** setting. Directories and files are sorted separately. Directories are always displayed first and files are displayed after directories.

(5) SORT ORDER

Allows you to specify whether the directories and files are sorted in ascending or descending order.

ASCEND	Directories and files are sorted in ascending order. Files are sorted by the attribute specified in **SORT MODE** (4).
DESCEND	Directories and files are sorted in descending order. Files are sorted by the attribute specified in **SORT MODE** (4).

3-9. STILL (MBP-100CK Only)

On the MBP-100CK, still images can be assigned as the input signals to the mixer. The **STILL** menu allows you to load, copy, and delete still image files.

NOTE
The graphic signal input to the CG (V/K) INPUT connector cannot be captured on the MBP-100CK. Please use the import function to save the still image to the MBP-100CK.

3-9-1. Loading a Still Image

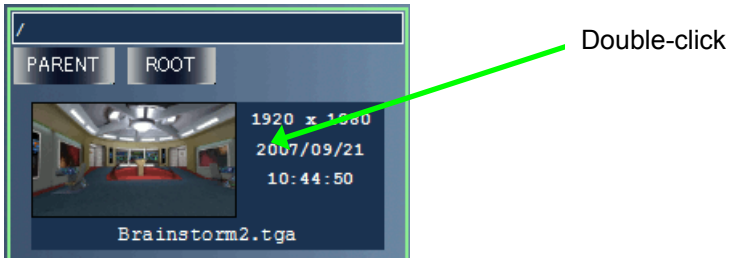
Selecting the **STILL** menu displays the following items. The items are basically the same as **CAPTURE > PENE MODE >FILER**, except that **PANE MODE** is fixed to **FILER**.

NOTE
Still images are saved in the dedicated directory, separately from the captured images. The captured image files cannot be browsed from the **STILL** menu, and the still image files cannot be browsed from the **CAPTURE** menu. To use the still image and captured image together, either of them need to be exported and imported into the other side.

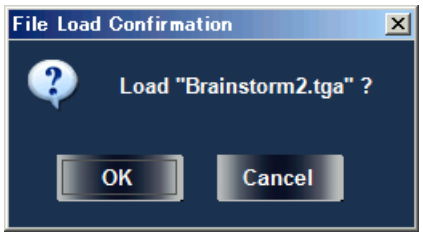
In the example below, two still images are imported in advance.

Still images are loaded in the same manner as the steps described in section 3-8-3. “Loading a Captured Still Image.”

1. Select **STILL** for the **MIXER** output and confirm that the still image (appears solid black if the MBP-100CK is just booted) is output.



2. In the **FILER** pane, double-click the file you wish to load. A confirmation message is displayed. Click **OK** to load the file. Confirm the image is output properly.



3. If the resolution of the loaded file differs from the resolution of the TV standard currently specified in the main unit, the file is processed as described in step 3, in section 3-8-3. “Loading a Captured Still Image.”

3-9-2. Other File Operations

The following file operations are done in the same manner as the **CAPTURE** menu.

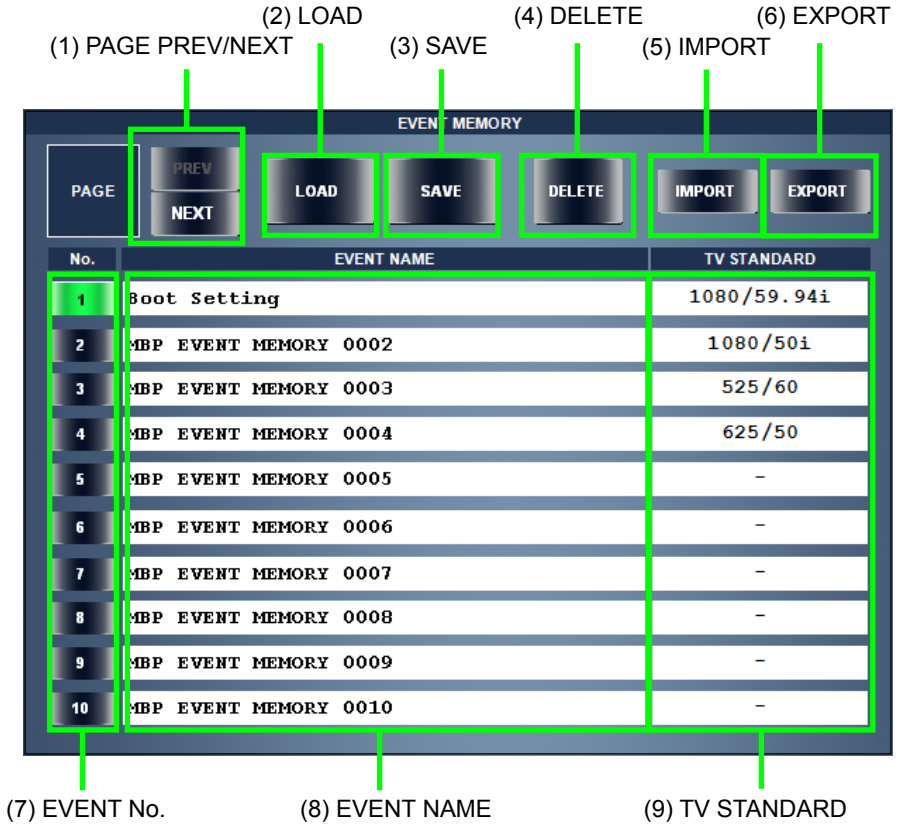
3-8-4. “Directories”
  3-8-4-1. “Creating a Directory”
  3-8-4-2. “Moving Between Directories”
  3-8-4-3. “Saving a Captured Image to a Directory”
3-8-5. “Renaming a File”
3-8-6. “Deleting Files”
3-8-7. “Removing Directories”
3-8-8. “Copying and Moving Files Between Directories”
3-8-9. “Importing Files”
3-8-10. “Exporting Files”
3-8-11. “Viewing Items in FILER”

3-10. EVENT MEMORY

EVENT MEMORY allows you to set the event memory settings. The following settings can be saved, loaded, and deleted at once.

- TV standard
- Genlock settings (format, phase)
- Camera delay settings
- Mixer settings
- Chromakey settings (Available only if MBP-12CK is installed, and only on the MBP-100CK)

・ The event memory data is saved on **MBP-12Server**. Up to 100 events can be saved.
・ Each event has an event name. The event can be renamed even if it is empty.
・ The default event name is **MBP EVENT MEMORY xxxx**, where **xxxx** is the event number. For example, event number 10 is displayed as **MBP EVENT MEMORY 0010**.



(1) PAGE PREV/NEXT
Allow you to move between pages. 10 events are displayed per page.

(2) LOAD
Allows you to load a saved event.

(3) SAVE
Allows you to save the current settings to an event.

(4) DELETE
Allows you to delete a saved event.

(5) IMPORT
Allows you to transfer and register the event data in the file saved by the EXPORT to the MBP-12Server.

(6) EXPORT
Allows you to save the event data to a file on the computer the MBP-12GUI is running.

(7) EVENT No.
Allows you to select the event number of an event.

(8) EVENT NAME
Allows you to set the name of each event. It can be up to 40 single-byte alphanumeric characters in length. Double-byte characters cannot be used.

(9) TV STANDARD
Displays the TV standard saved in each event. A hyphen (-) is displayed for empty events.

3-10-1. Saving Event

Follow the steps below to save the current settings to an event.

(1) Select the event number of an event you wish to save the settings. Up to 100 events (No.1 to No.100) can be saved.
(2) Click the **SAVE** button. A confirmation message is displayed.
(3) Click **OK** to save the event. The current settings are saved in the event of the selected event number.
(4) Click **Cancel** to cancel saving an event.

3-10-2. Loading Event

Follow the steps below to load a saved event.

(1) Select the event number of an event you wish to load.
(2) Click the **LOAD** button. A confirmation message is displayed.
(3) Click **OK** to load the event. The settings saved in the event of the selected event number is loaded to the main unit.
(4) Click **Cancel** to cancel loading an event.

3-10-3. Deleting Event

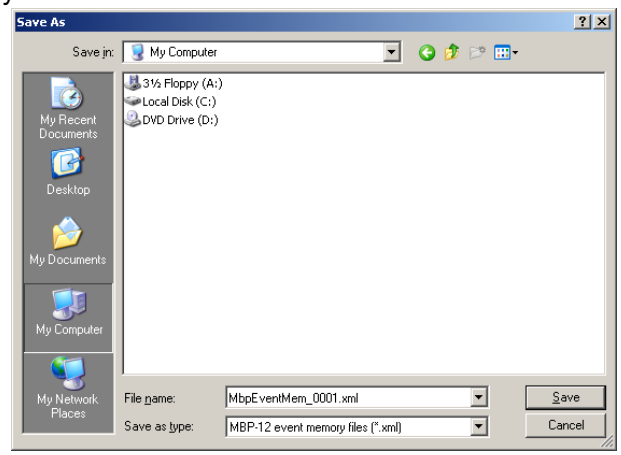
Follow the steps below to delete a saved event.

(1) Select the event number of an event you wish to delete.
(2) Click the **DELETE** button. A confirmation message is displayed.
(3) Click **OK** to delete the event. The saved settings are deleted and the event name is reset to the default of **MBP EVENT MEMORY _xxxx**. (xxxx is the event number.)
(4) Click **Cancel** to cancel deleting an event.

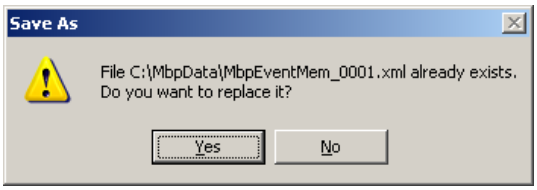
3-10-4. Exporting Event Data

Each event can be duplicated and used on the other MU (MBP-1244 or MBP-100CK) by using the provided export function to save event data to files and the import function which is explained in the next section.

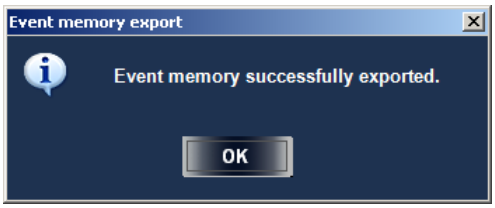
(1) Select the event number of an event you wish to export.
(2) Click the EXPORT button. The **Save as** dialog box to choose a location to save the file is displayed.



(3) The default file name is MbpEvemtMem_xxxx.xml (xxxx is the event number). The default file name can be changed. Choose a folder to save the event data, set a file name, and then click **Save**. If you choose a file already exists, a confirmation message for overwriting the file is displayed. Click **Yes** to overwrite the file.



(4) If the exporting is successfully complete, the message as below is displayed.



IMPORTANT
Do not save the data to the C: drive of the MBP-100CK, since the C: drive is write-protected. Although you can save the data to the C: drive, the data will be lost when the MBP-100CK is restarted. Save the data to the D: drive or a USB device.

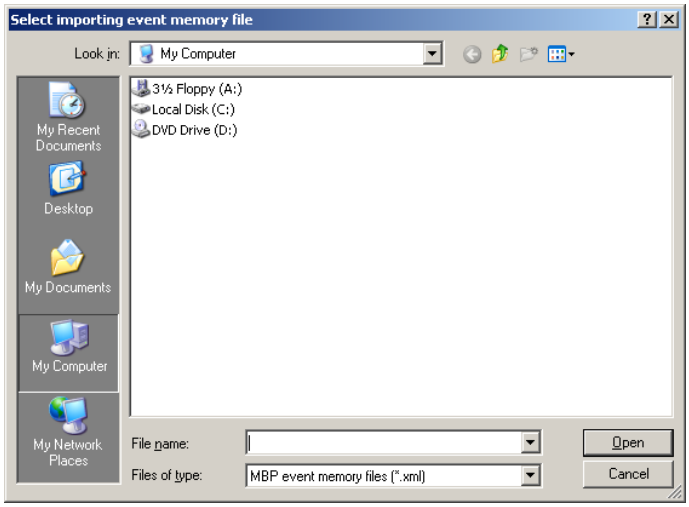
3-10-5. Importing Event Memory

Follow the procedure below to register the exported event data.

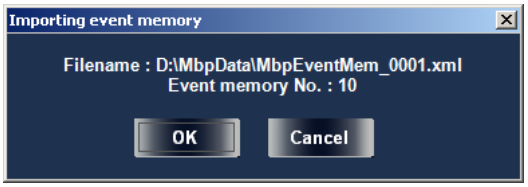
(1) Select the event number to which you wish to import the event data.

IMPORTANT
The event number does not need to be the same with the exported event number.

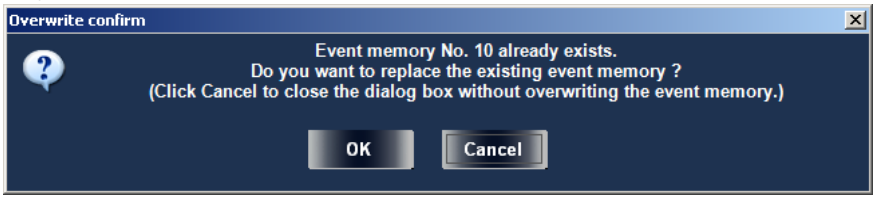
(2) Click the **IMPORT** button. A dialog box is displayed.



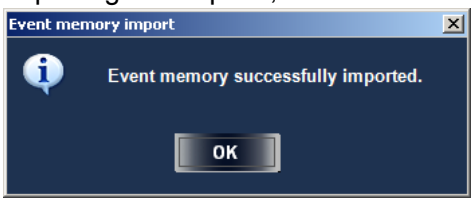
(3) Select a file to import the event data from, and click **Open**. A confirmation message to confirm the file name and the event number. Click **OK** to import.



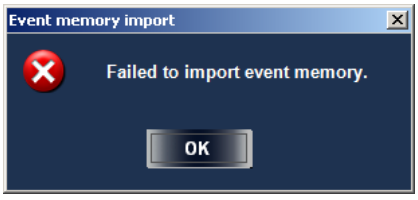
(4) If there is an event data in the selected event file, a confirmation message for overwriting is displayed. Click **OK** to overwrite.


Overwrite confirm
Event memory No. 10 already exists.
Do you want to replace the existing event memory ?
(Click Cancel to close the dialog box without overwriting the event memory.)
OK
Cancel

(5) If the importing is complete, the success message is displayed.



If the selected file is not an event data or damaged, an error message is displayed. Verify the selected file is proper and normal.



3-10-6. Renaming Event

Follow the steps below to rename an event.

NOTE
The event can be renamed even if it is empty.

(1) Double-click the event name of an event you wish to rename, or click to select the event name of an event you wish to rename and press the **ENTER** key. It is not necessary to select an EVENT No. button.
(2) The background color of the text box is changed from white to blue, which indicates that you have entered the edit mode. Rename the event.

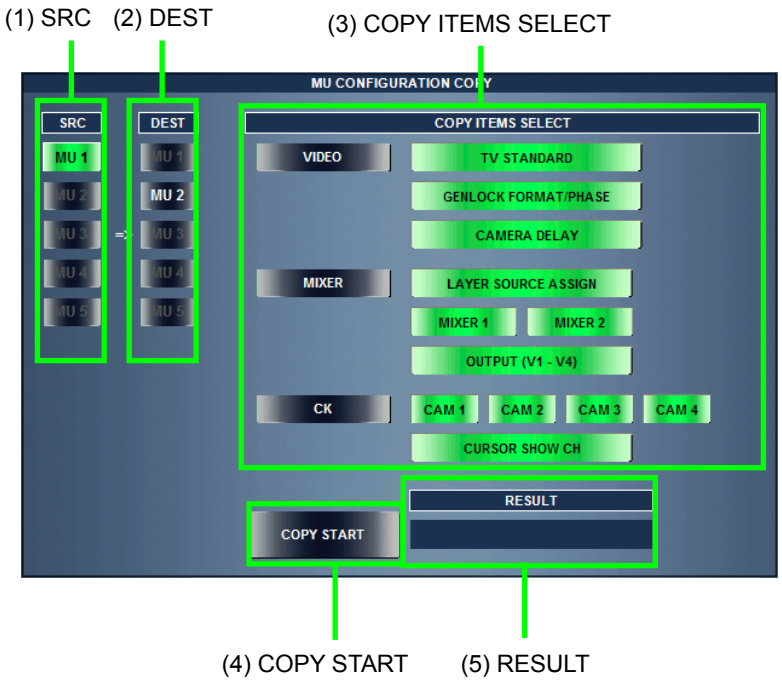
NOTE
The event name can be up to 40 characters in length. The characters supported (alphabets, space, hyphen, and underscore) are shown below. Double-byte characters are not supported. ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 -_

(3) After renaming, press the **ENTER** key to apply the change. A confirmation message is displayed. Press the **ESC** key to cancel renaming and exit the edit mode.
(4) Click **OK** to rename the event name and exit the edit mode.
(5) Click **Cancel** to cancel renaming and exit the edit mode.

3-11. COPY (MU)

COPY (MU) allows you to copy the following settings between main units. Whether or not to copy each setting can be selected.

- TV standard
- Genlock settings (format, phase)
- Camera delay settings
- Mixer settings
- Chromakey settings



(1) SRC

Indicates a source main unit for copying the settings. A main unit that is selected with a MU button is automatically selected.

(2) DEST

Allows you to select a destination main unit for copying the settings. The currently connected main unit can only be selected.

(3) COPY ITEMS SELECT

Allows you to select the items you wish to copy. Clicking each section (VIDEO, MIXER, CK) button inverts the selection of the section. The **CK** section is disabled if **MBP-12CK** (optional) is not installed in the main unit.

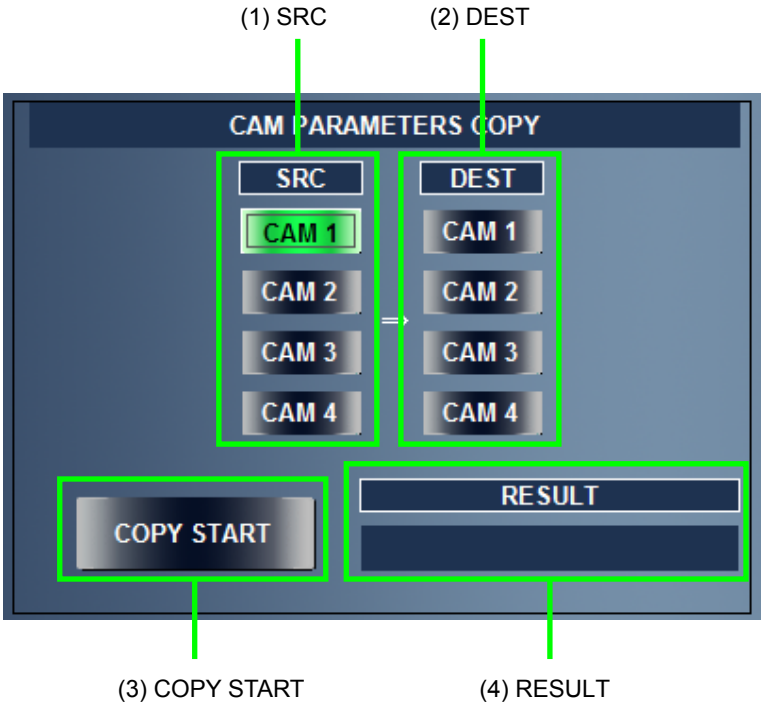
Section	Item	Description
VIDEO	TV STANDARD	TV standard.
	GENLOCK FORMAT/PHASE	Genlock format and genlock phase.
	CAMERA DELAY	Camera delay (ON/OFF, Frame, V, H)
MIXER	LAYER SOURCE ASSIGN	USER1, USER2, USER3
	MIXER 1, MIXER 2	MIXER 1 and MIXER 2 settings (PRESET MODE, SRC ON/OFF, MIX MODE)
	OUTPUT (V1-V4)	Output channel settings
CK	CAM 1, CAM 2, CAM 3, CAM 4	Camera parameter settings
	CURSOR SHOW CH	Cursor display setting for chromakey for each output channel

(4) COPY START
Clicking this button after selecting a destination in **DEST** copies the settings.

(5) RESULT
If copying the settings is complete successfully, **COPY SUCCESS** is displayed. If an error occurs, **COPY ERROR** is displayed.

3-12. COPY (CAM)

COPY (CAM) allows you to copy the chromakey settings, Window Mask settings, and Color Adjust settings between cameras connected to the same main unit.



(1) SRC
Allows you to select a source camera for copying the settings.

(2) DEST
Allows you to select a destination camera for copying the settings.

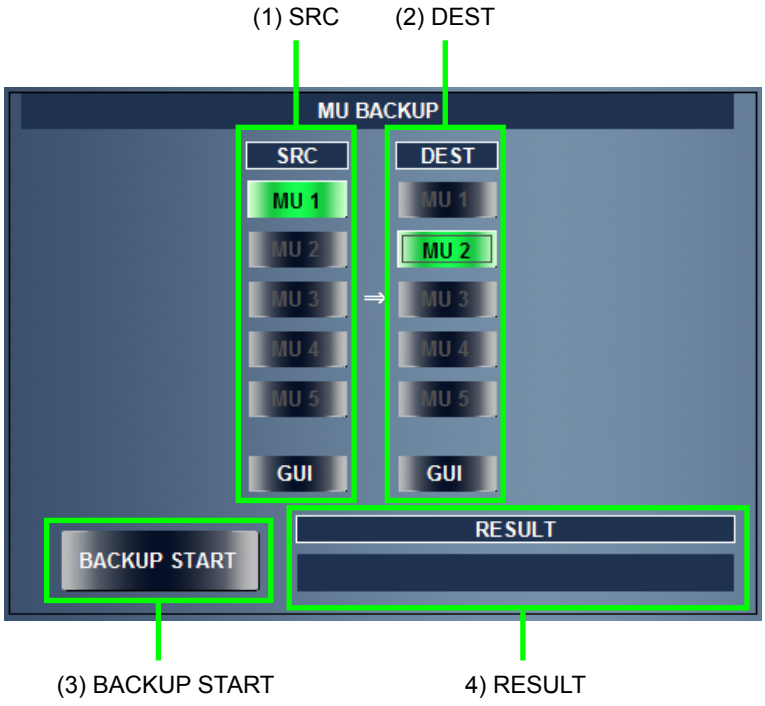
(3) COPY START
Clicking this button after selecting both **SRC** and **DEST** copies the settings.

(4) RESULT
If copying the settings is complete successfully, **COPY SUCCESS** is displayed. If an error occurs, **COPY ERROR** is displayed.

3-13. BACKUP (MU)

BACKUP (MU) allows you to backup all settings of a main unit including the event memory settings. However, the folder settings for saving the system log and event memories are excluded from backup.

- Backs up the settings to a computer on which MBP-12GUI is running.
- Restores the settings backed up on a computer to a main unit.
- Copies the settings in a main unit to another main unit. Unlike **COPY (MU)**, it copies the event memories as well.



(1) SRC
Allows you to select a source main unit for backup. A main unit that is selected with a MU button and **GUI** can only be selected. To restore the data backed up on a computer to a main unit, select **GUI**.

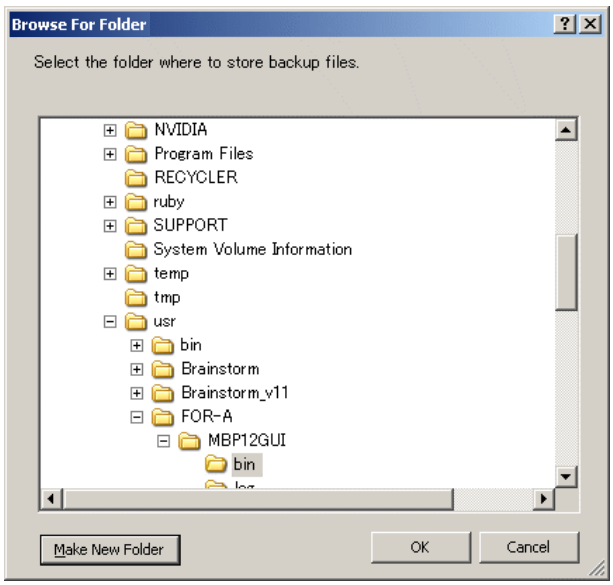
(2) DEST
Allows you to select a destination main unit. To backup the data to a computer, select **GUI**.

(3) BACKUP START
Clicking this button after selecting both **SRC** and **DEST** starts the backup.

(4) RESULT
If copying the settings is complete successfully, **COPY SUCCESS** is displayed. If an error occurs, **COPY ERROR** is displayed.

3-13-1. Backing Up to a Computer

Selecting **GUI** for **DEST** and clicking **BACKUP START** opens the **Browse for Folder** dialog box. Select a destination folder and click **OK**.



A total of 101 backup files, which consist of a file (**MBP12ServerIni.xml**) that contains settings other than the event memory settings and 100 files (**MBP12EventMem_0001.xml to MBP12EventMem_0100.xml**) that contain the event memory settings, are created for one main unit. For the reason of saving the event names, the files for empty events are also created.

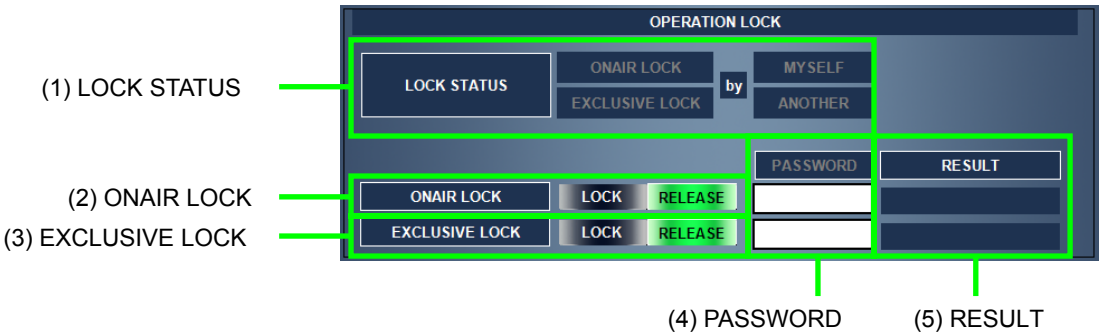
3-13-2. Restoring to a Main Unit

Selecting **GUI** for **SRC** and clicking **BACKUP START** opens a dialog box for selecting a folder that contains the backup data. Select a folder and click **OK**. If the 101 files created using the steps described in section 3-13-1“Backing Up to a Computer” do not exist in the selected folder, the restoration cannot be performed, and an error message is displayed in the RESULT box on the MU BACKUP window.

IMPORTANT
Be sure to **RESTART MBP-12Server** to apply the data after the restoration is completed.

3-14. OPERATION LOCK

OPERATION LOCK allows you to inhibit operations by other clients (MBP-12GUI or MBP-12RU) for preventing accidental operations. There are two types of lock functions available: **ONAIR LOCK** and **EXCLUSIVE LOCK**.



(1) LOCK STATUS

Displays the current status of **OPERATION LOCK**. There are four status states:

(a) **ONAIR LOCK** applied by the client itself (**ONAIR LOCK by MYSELF**)
(b) **ONAIR LOCK** applied by another client (**ONAIR LOCK by ANOTHER**)
(c) **EXCLULSIVE LOCK** applied by the client itself (**EXCLUSIVE LOCK by MYSELF**)
(d) **EXCLULSIVE LOCK** applied by another client (**EXCLUSIVE LOCK by ANOTHER**)

(2) ONAIR LOCK

Allows you to apply **ONAIR LOCK**. Click **LOCK** to apply **ONAIR LOCK**, and click **RELEASE** to release **ONAIR LOCK**. To release **ONAIR LOCK** applied by another clients, enter the correct password in **PASSWORD** and click **RELEASE**.

(3) EXCLULSIVE LOCK

Allows you to apply **EXCLUSIVE LOCK**. Click **LOCK** to apply **EXCLULSIV LOCK**, and click **RELEASE** to release **EXCLULSIV LOCK**. To release **EXCLULSIV LOCK** applied by another clients, enter the correct password in **PASSWORD** and click **RELEASE**.

(4) PASSWORD

Allows you to define a password for releasing **ON AIR LOCK** or **EXCLUSIVE LOCK** applied by another client. The password can be between 0 to 8 single-byte alphanumeric characters in length. The entered password is not saved when the application is closed.

(5) RESULT

Displays the result for when the operation lock is applied or released.
LOCK SUCCESS: displayed when the operation lock is applied successfully.
LOCK RELEASED: displayed when the operation lock is released successfully.
PASSWORD INVALID: displayed when the password does not match the one defined.

3-14-1. ONAIR LOCK

ONAIR LOCK inhibits all operations of MBP-1244 while broadcasting on the air, except for the four operations shown below.

(1) Releasing of **ONAIR LOCK** by the client (MBP-12GUI or MBP-12RU) which applied **ONAIR LOCK**. The client is recognized by the TCP session, therefore it is recognized as a different client once disconnected.
(2) Obtaining of status by other clients.
(3) Releasing of **ONAIR LOCK** by the client on the workstation on which MBP-12Server is running.
(4) Releasing of **ONAIR LOCK** which a password is authenticated. The password can be between 0 to 8 single-byte alphanumeric characters in length and it is defined through MBP-12Server. This is set separately from the password for canceling **EXCLUSIVE LOCK**.

3-14-2. EXCLUSIVE LOCK

EXCLUSIVE LOCK allows a client to inhibits all operations of MBP-1244 by all other clients, except for the four operations shown below.

(1) All operations by the client which applied **EXCLUSIVE LOCK**. The client is recognized by the TCP session, therefore it is recognized as a different client once disconnected.
(2) Obtaining of status by other clients.
(3) Releasing of **ONAIR LOCK** by the client on the workstation on which MBP-12Server is running.
(4) Releasing of **EXCLUSIVE LOCK** which a password is authenticated. The password can be between 0 to 8 single-byte alphanumeric characters in length, and it is defined through MBP-12Server. This is set separately from the password for canceling **ONAIR LOCK**.

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*The contents of this manual are subject to change without notice.